

G 1146 M1B58x 1993 Porter



G 11-16 MR59x Digitized by the Internet Archive in 2016 with funding from University of Waterloo Library



CANADIAN INDUSTRY IN 1871

Research Report 14

INDUSTRY IN ONTARIO COUNTIES, 1871: A PRELIMINARY ATLAS

G.T. Bloomfield and Elizabeth Bloomfield with L.W. Laliberté

Elizabeth Bloomfield, series editor







Cover Illustration (selected and described by G.T. Bloomfield)

The view of Whitevale, Township of Pickering, was chosen to illustrate Canadian industry in 1871. At this time, a high proportion of manufacturing activity was still located in small settlements, some of which were growing rapidly into towns. Lovell's Directory (1871) described Whitevale as:

A thriving village...[with] extensive flouring and woollen mills... Montreal Telegraph Co has an office here. Distant from Whitby, the county town, and a station of the Grand Trunk Railway, 13 miles. Mail daily. Population about 250.

Truman P. White has acquired the water rights at Majorville on Duffin's Creek in 1845 and developed a grist mill, a saw mill and, later, a woollen mill. By 1871 the census enumerated six significant industrial establishments employing 66 workers and with a total value of production amounting to \$125,000. The transition from waterwheels (70 horsepower) to steam engines (66 horsepower) was already apparent in the village by this date. In common with its counterparts across the country, Whitevale's basic industrial activities were closely associated with the local agricultural area. There was also considerable economic integration apparent in the ownership of several establishments by Truman P. White and in the making of staves in the sawmill for the cooper shop which in turn supplied the flour mill with basic containers for transporting the flour to market.

Unlike many of its contemporaries, Whitevale has remained about the same size ever since 1871. The 1971 census recorded a population of only 273 in the unincorporated settlement. Whitevale never achieved connection by railway, county road or provincial highway. Much of the surrounding land was acquired for the planned Pickering airport and new town in 1972/3 and today the settlement is threatened by the creation of a municipal solid waste dump for Metropolitan Toronto and the Durham Region.

The illustration was first published in the Illustrated Historical Atlas of the County of Ontario (Toronto: J.H. Bees and Co., 1877), reprinted Ross Cumming, 1972).

G 1146 M1B58X 1993 Portes

Research Report 14

INDUSTRY IN ONTARIO COUNTIES, 1871: A PRELIMINARY ATLAS

G.T. Bloomfield and Elizabeth Bloomfield

with L.W. Laliberté

Elizabeth Bloomfield, series editor

Department of Geography
University of Guelph

Copies may be ordered from:

CANADIAN INDUSTRY IN 1871 PROJECT
Department of Geography
University of Guelph
GUELPH, ONTARIO
N1G 2W1

Copyright C 1992 G.T. Bloomfield

Canadian Cataloguing in Publication Data

Bloomfield, G. T. (Gerald T.)
Industry in Ontario counties, 1871: a preliminary atlas

(Canadian industry in 1871; 14)
Includes bibliographical references and index.
ISBN 0-88955-320-3

1. Ontario - Industries - History - 19th century - Maps. 2. Ontario - Census, 1871. 3. Canada - Census, 1871. I. Bloomfield, Elizabeth. II. University of Guelph. Dept. of Geography. III. Title. IV. Series.

G1146.M1B58 1993 338'.009713'0223 C93-094038-5

CONTENTS

1	Introduction: industry in Untario Councies, 1871	1
2	Introduction to the CANIND71 Database	3
	Table 1: Standard Industrial Classification	6
	Table 2: Variable names in CANIND71 database	7
3	Dimensions and Characteristics of Industry in Ontario in 1871	8
	Table 3: Canada: summary of industrial data by provinces	8
	Table 4: Evidence of the industrial workforce	9
	Table 5: Participation rates in industrial work	9
	Table 6: Concentration of female industrial workers	10
	Table 7: Ontario: size-classes of industrial establishments	11
	Plate 1: Ontario: water-power, steam-power and sawmilling	facing 12
	Table 8: Ontario: types of industrial power	13
	Table 9: Urban percentages of industrial activity	14
	Plate 2: Ontario: mail service routes and postal receipts	facing 16
	Table 10: Ontario: size classes of central places	17
	Plate 3: Leeds-Lanark region, 1871: sample industrial maps	facing 18
	Plate 4: Ontario: municipal counties, 1871	, 19
4	Ontario County Profiles	20
	Brant County	20
	Bruce County	24
	Carleton County	28
	Elgin County	32
	Essex County	36
	Frontenac County	40
	Grey County	44
	Haldimand County	48
	Halton County	52
	Hastings County	56
	Huron County	60
	Kent County	64
	Lambton County	68
	Lanark County	72
	Leeds and Grenville County	76
	Lennox and Addington County	80
	Lincoln County	84
	Middlesex County	88
	Norfolk County	92
	Northumberland and Durham County	96
	Ontario County	100
	Oxford County	104
	Peel County	108
	Perth County	112
	Peterborough County	116
	Prescott and Russell County	120
	Prince Edward County	124
	Renfrew County	128
	Simcoe County	132
	Stormont, Dundas and Glengarry County	136
	Victoria County	140

Ontario County Profiles (continued)	
Waterloo County	144
Welland County	148
Wellington County	152
Wentworth County	156
York County	160
Northern Districts	164
Appendices	
Table A-1: Ontario counties: geographical summary, 1871	168
Table A-2: Ontario counties ranked by: value of industrial output;	
added value; number of industrial workers; women	
workers; water power; steam power; horse power; output	
of water-power firms; output of steam-power firms;	
output of hand-power firms	182
Table A-3: Index to census sub-districts in Ontario counties, 1871	192

ACKNOWLEDGEMENTS

Between 1982 and 1990, the CANIND71 Project based in the Department of Geography of the University of Guelph, computerized the full data for some 45,000 industrial establishments that were enumerated in Canada's first national census in 1871. We appreciate the shelter and support provided to the project by the Department of Geography. Creation and documentation of the CANIND71 database were substantially assisted by several grants from the Social Sciences and Humanities Research Council of Canada between 1985 and 1989. The most substantial of these were Grants 482-87-0010 and 482-88-0010 to Elizabeth Bloomfield as principal investigator. In a new phase of the project (supported in part by SSHRCC grants 410-89-0099 and 410-91-0471) Gerald Bloomfield (as principal) with Janet Mersey and Elizabeth Bloomfield have been developing computer methods of mapping the historical data in CANIND71 and associated databases.

The interest and support of all who have assisted with this project are gratefully acknowledged. Janine Grant, Barbara Sibley, Jane Turner, Jane Darch and Stephen Bellinger worked for the project for significant periods, and the quality of the final database owes much to their careful and thorough work. Peter McCaskell, first as programmer-analyst in the Department of Geography and later from the University's Computing Services, played an essential role in database management and programming through all phases of the project. Mario Finoro, chief technician of the Department of Geography, has assisted in the acquisition, setting up and maintenance of the equipment. The computer maps in this report were executed by Larry Laliberté who worked part-time for the project from 1989 to 1992, while the graphs of industrial structure were produced in final form by Marie Puddister.

INTRODUCTION: INDUSTRY IN ONTARIO COUNTIES, 1871

1

The first Census of Canada was taken at a time when the "hum of industry" was believed to be an essential sign of a community's progress, usually associated with the benefits of railway connections. Many people at this time seem to have shared Thomas Keefer's vision of "the civilizing tendency of the locomotive":

A town has been built and peopled by the operatives — land rises rapidly in value — the neglected swamp is cleared and the timber is converted into all sorts of wooden "notions" — tons of vegetables, grains or grasses are grown where none grew before — the patient click of the loom, the busy hum of the spindle, the thundering of the trip-hammer and the roaring of steam, are mingled in one continuous sound of active industry. ¹

The year 1870 has been noted as the beginning of Canada's "industrial revolution". New surveys of the economic history of nineteenth-century Canada have drawn attention to the diversity of economic activity by this date and have tended to revise an earlier emphasis on the role of "staples", the natural resources traditionally extracted and exported to Europe. But substantive studies of the period around 1870, by economic historians and political economists as well as geographers and historians, have had to depend either on national or provincial totals or on rather crude efforts to reconstitute published data for county units which did not correspond to the actual census districts which were defined differently from one census to the next. Some general surveys refer to individual enterprises for which some records have survived, but without any means of knowing how representative these firms were of

¹ T.C. Keefer, <u>Philosophy of Railroads (1850)</u>, edited with an introduction by H.V. Nelles (Toronto: University of Toronto Press, 1972), p. 9.

² Ian Drummond, <u>Progress Without Planning: the Economic History of Ontario from Confederation to the Second World War</u> (Toronto: University of Toronto Press, 1987); Michael B. Katz, Michael J. Doucet and Mark J. Stern, <u>The Social Organization of Industrial Capitalism</u> (Cambridge, MA: Harvard University Press, 1982).

³ Douglas McCalla and Peter George, "Measurement, Myth and Reality: Reflections on the Economic History of Nineteenth-Century Ontario," <u>Journal of Canadian Studies</u> 21 (1986): 71-86.

⁴ G.W. Bertram, "Historical Statistics on the Growth and Structure of Manufacturing in Canada, 1870-1937," <u>Papers, Canadian Political Science Association on Statistics</u> (1962-3): 93-151; E.J. Chambers and G.W. Bertram, "Urbanization and Manufacturing in Central Canada, 1870-1890." In S. Ostry and T.K. Rymes, <u>Papers on Regional Historical Statistics</u> (Toronto: University of Toronto Press, 1966); J.M. Gilmour, <u>Spatial Evolution of Manufacturing</u>, <u>Southern Ontario 1851-1891</u> (Toronto: University of Toronto, Department of Geography, 1972).

contemporary businesses.⁵ Until now, our understanding has been based on generalizations at the national or provincial level, which cannot convey the richly variegated texture of economic activity from place to place, or on telling vignettes of specific firms out of their context of time and place.

The CANIND71 database, created from the manuscript census schedules of more than 45,000 industrial establishments, now provides rich evidence of manufacturing in Canada just after Confederation. Computer coding and processing of the full details for each establishment, including its geographical location and industry classification, allow us to generalize more confidently about the structure and spatial organization of industry. The CANIND71 database and various associated datasets offer enormous scope for research of many kinds.

In this report, we focus on Ontario's economic landscape in 1871. The 36 municipal counties of Ontario varied in the amount and intensity of "active industry", depending on how long they had been settled, how much of their population lived in cities and towns, and how well connected they were by rail or water transport. This report presents a preliminary survey of the regional diversity of industry in the province, illustrated by some results of the project's experiments in computer mapping of the CANIND71 database.

Next, we introduce the main features of the CANIND71 database, especially its geographical organization and industrial classification. Then we outline the characteristics of industrial activity that have been considered in this county-by-county survey of Ontario.

The main body of the report presents profiles of individual Ontario counties, each consisting of:

- * one page of text summarizing the structure and characteristics of industry in that county, such as scale of operations, location and distribution, industry types, use of water and steam power, workplace types, and leading firms,
- * a map of the county showing census subdistricts and railway lines,
- * bar-graphs allowing one to compare the industrial structures of Ontario, the particular county, and any urban centres with at least 2,500 population, and
- * a table providing data and percentages for each industry group in that county.

Appendices include a summary table of all Ontario counties with their census subdivisions, a set of tables ranking Ontario counties by various measures of industrial significance, and an index to the names of all Ontario census subdistricts.

⁵ Michael Bliss, <u>Northern Enterprise</u>: <u>Five Centuries of Canadian Business</u> (Toronto: McClelland and Stewart, 1987); Ben Forster, "Finding the Right Size: Markets and Competition in Mid- and Late Nineteenth-Century Ontario," in Roger Hall et al. eds. <u>Patterns of the Past: Interpreting Ontario's History</u> (Toronto and Oxford: Dundurn Press, 1988).

INTRODUCTION TO THE CANIND71 DATABASE

2

The CANIND71 database is a machine-readable version of the original manuscript information for more than 45,000 industrial establishments counted in the first Census of Canada in 1871. This new source provides a wealth of information for the four provinces enumerated in 1871 – New Brunswick, Nova Scotia, Ontario and Quebec. The 1871 census was the first to be taken on a consistent basis for the four provinces. Although similar information was collected in the Canadian censuses of 1881, 1891, 1901 and 1911, the manuscript schedules for industry have not survived. The 1871 census manuscripts are thus the only systematic source for industrial activity that survives in such detail from the nineteenth century. Moreover, the 1871 schedules contain a great deal of information that was never published at the time.

In using the CANIND71 data, we should understand the definitions and procedures used by the 1871 census enumerators:⁶

- * Industrial businesses found by the census enumerators as they made their rounds in early April 1871 were included, and details were recorded of their operations during the preceding twelve months.
- * An industrial establishment was defined as "a place where one or several people are employed in manufacturing, altering, making up or changing from one shape into another, materials for sale, use or consumption, quite irrespectively of the amount of capital employed or of the products turned out" (p. 138). No minimum value of output was set, in contrast to the United States censuses in the same period, for which only establishments with at least \$500 worth were included.
- * All repairs, mending or custom work were understood to be industrial products. Thus the definition of industrial activity was considerably broader than it would be in the twentieth century.
- * Numbers of workers or "employés" were defined to be the average number of persons actually working in the industrial establishment during the 12-month reporting period, and could consist entirely of members of the proprietor's family. The industrial workforce was subdivided by age and gender into men, women, boys (males under 16 years) and girls (females under 16 years), but the amount of wages paid to each age-gender group of worker was not separately stated.
- * Industrial establishments were recorded in the geographical units -- District, Sub-District or Division -- in which they were found "and nowhere else. The principle is essential in every case. The production is attached to the locality" (p. 139).
- * In reporting custom work such as tailoring or work done on toll such as that of some grist mills or carding mills, enumerators were told to state the real value of raw materials, even if these amounts did not pass through the accounts of the proprietor.

⁶ "Manual Containing the Census Act and Instructions to Officers Employed in Taking of the First Census of Canada, 1871," <u>Canada Sessional Papers</u> No. 64 (1871). Quotations are from this source.

- * Though enumerators could specify the types, quantities and values of individual raw materials and products for each establishment, it was foreseen that in most cases only the aggregate dollar values or raw materials and products would be stated.
- * Values of fixed capital and floating capital invested in the industrial business were distinguished rather than merged, and the number of working months was specified.

Only a very limited amount of the information collected in Schedule 6 of the 1871 census was published in the official census volumes of the 1870s. The statistical tables published at the time used various industrial types that were defined pragmatically rather than systematically, and then listed in alphabetical order. For each industry type, whether as specialized as whip making or as ubiquitous as blacksmithing, figures were published for numbers of establishments, hands employed, yearly wages, value of raw materials and value of products in each of 206 Census Districts.

No industrial data at all were published for smaller areal units such as the Census Sub-Districts, either as summaries of total industrial activity or for specific types of industry. Thus the only 1871 industrial information published for urban centres was for the six cities, the boundaries of which exactly coincided with those of one or more Census Districts. These were Montreal, Toronto, Hamilton, Ottawa, London and Kingston. Some information collected by the enumerators was never compiled into published tables, notably for types and horse-power units of inanimate power, months of operation during the reporting period, and "floating" capital distinguished from "fixed" capital. The published totals also understated the real extent and value of industrial activity as these can now be reconstituted from the manuscript census schedules.⁸

Database Variables

The CANIND71 database has made machine-readable information about all the industrial firms counted in Canada's first national census. For each establishment, there are up to 125 variables. The firms were located in 206 Census Districts and over 1600 Census Sub-Districts in Ontario, Quebec, New Brunswick and Nova Scotia. All details recorded by the enumerators on the manuscript census schedules have been included as basic variables in the CANIND71 database. These are: name of proprietor, kind of industrial business, geographical location, use of non-manual forms of power, numbers of workers (men, women, boys and girls), number of working months in the year, and the dollar amounts of fixed and floating capital invested, wages, raw materials and products, as well as kinds, quantities, units of measurement and values of individual raw materials and products, and additional remarks or comments.

In addition to the information transcribed from the census manuscripts, the CANIND71 database contains several variables derived by calculation or inference from the basic variables. These include the total values of raw materials or of products (when only details for component products or materials had been stated on the

⁷ Census of Canada 1871, volume III, Tables 28-55.

⁸ For a more detailed discussion of the 1871 Census procedures and a comparison of the published and manuscript data for industry in 1871, see Elizabeth Bloomfield and G.T. Bloomfield, <u>Creating CANIND71: Procedures for Making the 1871 Census Machine-Readable</u> (CANIND71 Research Report 4, 1989).

manuscript schedules), the value added (gross value of output less costs of raw materials when both these figures were reported), the total number of employees, and the average monthly wage per employee.

Geographical Organization

The original descriptions of geographical areas defined for the 1871 Census were researched to ensure that the codes and place names were entered accurately and consistently into the database. For ease in returning to the original schedules, we adopted the same code letters and numbers that were used in 1871 to describe the Census Districts, Census Sub-Districts and Census Enumerators' Divisions. The 206 Census Districts were intended to correspond with the Electoral Districts defined under the British North America Act 1867. Census Districts were divided into 1,701 Census Sub-Districts, which were intended to correspond with Municipal or other recognized divisions — towns, villages, townships or city wards in Ontario, for example. The Census Sub-Districts were subdivided into nearly 3,000 Census Enumerators' Divisions, but these were defined for convenience of census-taking rather than to coincide with any other system of defining areas and no maps or written descriptions of these units have survived. The survived.

Details of Census District name (with variable name CDISTRIC) and number (CDID), Census Sub-District name (CSD) and Census Enumerator's Division (CED) were coded for each manuscript record as it was entered into the CANIND71 database. Usually this information was written by the census enumerators on the manuscript schedules. But we had to standardize the names and codes for computer processing.

Industrial Classification

The census enumerators used natural language to describe the kinds of establishment and industrial raw materials and products they encountered. In creating the CANIND71 database, we entered the enumerators' words into the computer record, but we also assigned standardized codes to each record to denote industry types and major groups more precisely and consistently. These codes are vital for analysis of the data.

Each record in the CANIND71 database has been assigned a code according to the 1970 Standard Industrial Classification Manual of the Canada Dominion Bureau of Statistics. Understandably, there were some problems in applying a 1970

⁹ Statutes of Canada, 33 Vict. 1870, Cap. 21, s. 4.

¹⁰ See G.T. Bloomfield, <u>Boundaries of Canadian Census Units in 1871</u> (CANIND71 Research Report 10, 1990).

¹¹ See <u>Glossary of Industrial Language</u> (CANIND71 Research Report 5, 1989) and <u>French-English Dictionary of Industrial Language</u> (CANIND71 Research Report 6, 1989).

¹² For a more detailed discussion of our use of SIC codes, see G.T. Bloomfield, <u>Standard Industrial Classifications Applied to Historical Data</u> (CANIND71 Research Report 7, 1989). The CANIND71 classification is based on Dominion Bureau of Statistics, <u>Standard Industrial Classification Manual</u> (Ottawa, 1970); for French-

classification to the conditions of a century earlier. Changes in technology have eliminated some industry types that were common in 1871. The more rudimentary level of economic and business organization in 1871 meant that many enterprises combined industrial activities that would typically be separated in specialized businesses by 1970. Repair of all kinds of goods and equipment was more integrally associated with manufacture in 1871.

The appropriate code for each record was determined by study of both the stated kind of establishment and the actual products and raw materials reported in each case. Wherever possible, we chose the code that best matched the actual outputs of the business as reported for the year ending March 31, 1871. Some 700 Standard Industrial Classification codes were generalized into the 26 Major Industry Groups (or SECs) that were also coded for each record. This report discusses industrial structure in terms of these more general Major Industry Groups.

Table 1 Standard Industrial Classification: Major Groups and SIC codes

Division 1 Agricultural Services 021-029 Division 2 Forestry 031-039 Division 3 Fishing 041-049 Division 4 Mines, Salt Wells etc 051-099 Division 5 Manufacturing Industries 5.01 Food and Beverages 101-109 5.02 Tobacco Products 151-159 5.04 Leather Industries 171-179 5.05 Textile Industries 181-189 5.06 Knitting Mills 231-239 5.07 Clothing Industries 241-249 5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.18 Petroleum & Coal Products 361-369 </th <th>Major G</th> <th>ro</th> <th>up SEC</th> <th>SIC codes</th>	Major G	ro	up SEC	SIC codes
Division 3 Fishing 041-049 Division 4 Mines, Salt Wells etc 051-099 Division 5 Manufacturing Industries 5.01 Food and Beverages 101-109 5.02 Tobacco Products 151-159 5.04 Leather Industries 171-179 5.05 Textile Industries 181-189 5.06 Knitting Mills 231-239 5.07 Clothing Industries 241-249 5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 <td>Division</td> <td>1</td> <td>Agricultural Services</td> <td>021-029</td>	Division	1	Agricultural Services	021-029
Division 5 Manufacturing Industries 5.01 Food and Beverages 101-109 5.02 Tobacco Products 151-159 5.04 Leather Industries 171-179 5.05 Textile Industries 181-189 5.06 Knitting Mills 231-239 5.07 Clothing Industries 241-249 5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 7 Gas and Water Utilities 572-579 <td>Division</td> <td>2</td> <td>Forestry</td> <td>031-039</td>	Division	2	Forestry	031-039
Division 5 Manufacturing Industries 5.01 Food and Beverages 101-109 5.02 Tobacco Products 151-159 5.04 Leather Industries 171-179 5.05 Textile Industries 181-189 5.06 Knitting Mills 231-239 5.07 Clothing Industries 241-249 5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 7 Gas and Water Utilities 572-579 <td>Division</td> <td>3</td> <td>Fishing</td> <td>041-049</td>	Division	3	Fishing	041-049
Division 5 Manufacturing Industries 5.01 Food and Beverages 101-109 5.02 Tobacco Products 151-159 5.04 Leather Industries 171-179 5.05 Textile Industries 181-189 5.06 Knitting Mills 231-239 5.07 Clothing Industries 241-249 5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 7 Gas and Water Utilities 572-579 <td>Division</td> <td>4</td> <td>Mines, Salt Wells etc</td> <td>051-099</td>	Division	4	Mines, Salt Wells etc	051-099
5.01 Food and Beverages 101-109 5.02 Tobacco Products 151-159 5.04 Leather Industries 171-179 5.05 Textile Industries 181-189 5.06 Knitting Mills 231-239 5.07 Clothing Industries 241-249 5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 7 Gas and Water Utilities 572-579			•	
5.02 Tobacco Products 151-159 5.04 Leather Industries 171-179 5.05 Textile Industries 181-189 5.06 Knitting Mills 231-239 5.07 Clothing Industries 241-249 5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	Division	5	Manufacturing Industries	
5.04 Leather Industries 171-179 5.05 Textile Industries 181-189 5.06 Knitting Mills 231-239 5.07 Clothing Industries 241-249 5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.01		Food and Beverages	101-109
5.05 Textile Industries 181-189 5.06 Knitting Mills 231-239 5.07 Clothing Industries 241-249 5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.02		Tobacco Products	151-159
5.06 Knitting Mills 231-239 5.07 Clothing Industries 241-249 5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.04		Leather Industries	171-179
5.07 Clothing Industries 241-249 5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.05		Textile Industries	181-189
5.08 Wood Industries 251-259 5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.06		Knitting Mills	231-239
5.09 Furniture Industries 261-269 5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.07		Clothing Industries	241-249
5.10 Paper Industries 271-279 5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.08		Wood Industries	251-259
5.11 Printing and Publishing 281-289 5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.09		Furniture Industries	261-269
5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.10		Paper Industries	271-279
5.12 Primary Metal Industries 291-299 5.13 Metal Fabricating 301-309 5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.11		Printing and Publishing	281-289
5.14 Machinery Industries 311-319 5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.12		Primary Metal Industries	291-299
5.15 Transportation Equipment 321-329 5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.13		Metal Fabricating	301-309
5.17 Non-metallic Minerals 351-359 5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.14		Machinery Industries	311-319
5.18 Petroleum & Coal Products 361-369 5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.15		Transportation Equipment	321-329
5.19 Chemical Industries 371-379 5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.17		Non-metallic Minerals	351-359
5.20 Miscellaneous Manufactg 391-399 Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.18		Petroleum & Coal Products	361-369
Division 6 Construction Industry 401-499 Division 7 Gas and Water Utilities 572-579	5.19		Chemical Industries	371-379
Division 7 Gas and Water Utilities 572-579	5.20		Miscellaneous Manufactg	391-399
	Division	6	Construction Industry	401-499
Division 8 Trade (incl repair) 601-699	Division	7	Gas and Water Utilities	572-579
	Division	8	Trade (incl repair)	601-699
Division 10 Personal/business services 861-899	Division	10	Personal/business services	861-899

language equivalents we consulted Statistique Canada, Classification type des industries (Ottawa, 1990).

Table 2 Variable names in CANIND71 database

Abbreviated code names for variables in the CANIND71 database, as used in various tables in this and other reports, are briefly explained:

AVWAGE: Average monthly wage per worker in a firm, place or type of industry.

CDID: Census district number used in 1871 census.
CDISTRIC: Census district name used in 1871 census.

CED: Census enumerator's division, a small part of a census district.

COMMENTS: Additional remarks or comments for a firm entered in manuscript

schedule.

EMPBOY: Boys (males under 16 years) employed in industrial activity.

EMPGIRL: Girls employed (females under 16 years) in industrial activity.

EMPMEN: Men (males over 16 years) employed in industrial activity.

EMPWOM: Women (females over 16 years) employed in industrial activity.

FIXCAP: Value of fixed capital reported by proprietors.

FLOCAP: Value of floating or working capital reported by proprietors.

FORCE: Units (in "horse power" equivalents) of non-manual power reported by

proprietors.

MONTH: Number of working months in year.

OBSERV: Observation, unit or record in a database; in the case of CANIND71 means

individual industrial establishment.

PROD1: Named type of product, first to Nth, as numbered.
PROPRIOR: Name of proprietor as stated in census schedules.
PQUANT1: Quantity of named product, first to Nth, as numbered.

PUNIT1: Unit of measurement of named product, first to Nth, as numbered.

PVALUE1: Value of named product, first to Nth, as numbered RAWMAT1: Named type of raw material, first to Nth, as numbered. RQUANT1: Quantity of named raw material, first to Nth, as numbered.

RUNIT1: Unit of measurement of named raw material, first to Nth, as numbered.

RVALUE1: Value of named raw material, first to Nth, as numbered.

SEC: Major industry group, derived from combinations of SIC codes.

SIC: Standard Industrial Classification.

SUMPROC: Value of industrial production (\$).

SUMRAWC: Value of raw materials used in industry (\$).

TOTEMP: Total number of employees, the sum of EMPMEN, EMPWOM, EMPBOY

and EMPGIRL.

TYPEEST: Type of establishment as stated by enumerator in census schedules.

TYPEPOW: Type of power reported: steam, water, horse, W/S (water/steam).

VADD: Value added in manufacturing (\$) = production \$ - raw materials \$.

WAGES: Wages paid to industrial workers (\$).

Note: More details on the Canadian Industry in 1871 (CANIND71) database and project procedures and on the quality of the original census manuscripts may be found in <u>CANIND71 Manual/Manuel</u>, by Elizabeth Bloomfield, Gerald Bloomfield and Peter McCaskell (1991).

3 DIMENSIONS AND CHARACTERISTICS OF INDUSTRY IN ONTARIO IN 1871

Industrial activity was unevenly distributed in Canada in 1871. In almost all measures, for example, Quebec and especially Ontario had higher proportions of the national totals than their shares of total population (Table 3). Industry was more developed and mattered more in Ontario and Quebec than in the two Maritime provinces counted in 1871. In most measures, Ontario was highest and Nova Scotia lowest. These measures may also be calculated for smaller areas within the provinces in order to show finer variations from place to place.

Table 3
Canada: summary of industrial data, 1871
with percentages in each province

	CANADA #	Ontario %	Quebec %	NB ♣	ns %
Establishments	45,070	48.2	32.1	8.9	10.8
Fixed capital \$	87,731,701	52.9	31.6	6.2	7.0
Floating capital \$	70,034,255	51.2	38.1	6.7	3.7
Horse power units	220,704	52.4	30.6	8.8	8.2
Men employed	154,432	49.0	33.1	9.0	8.8
Women employed	24,958	48.2	41.9	6.8	3.4
Boys employed	13,722	45.4	36.3	11.3	6.9
Girls employed	4,204	30.6	62.5	3.3	3.6
Wages \$	42,261,184	53.4	30.6	8.1	7.9
Raw materials \$	127,568,152	52.1	36.7	5.3	4.5
Value of products	228,102,802	52.6	35.1	6.6	5.7
Added value \$	98,719,375	52.8	33.5	6.8	6.9
Population	3,689,257	43.9	32.3	7.7	10.5

Source: compiled from CANIND71 database.

One index is the mean value of industrial production per head of the whole population. In 1871, the mean value for all of Canada was \$61.83 worth of industrial output for every man, woman or child while the provincial values varied from \$73.97 in Ontario, to \$67.21 in Quebec, \$53.04 in New Brunswick and \$33.27 in Nova Scotia. Means for particular Ontario counties range from \$167.09 in York County (including Toronto) to \$23.52 in Bruce County.

Only a minority of the population counted in the 1871 Census was employed in industry. In the CANIND71 database, we capture a total of 154,432 men, 24,888 women, 13,822 boys and 4,764 girls who were reported by proprietors and enumerators as part of "the average number of employés" during the year ended March 31, 1871. Numbers employed in industrial establishments can, of course, be summed for smaller

areas and for various industry types. Table 4 presents these two kinds of information, with the percentages those classified in "industrial" occupations formed of the total occupied population in each province.¹³

Table 4
Evidence of the industrial workforce, 1871

	CANADA	Ontario	Quebec	NB	NS
CANIND71 database: Numbers employed	197,905	95,314	69,475	17,401	15,716
Occupation data: Numbers with industrial occupations	212,888	93,871	65,707	18,683	34,547
Total "with definite occupations"	1,009,848	463,424	341,291	86,488	118,645
"Industrial" % total	21.1%	20.4%	19.6%	21.6%	29.1%

Source: first line compiled from CANIND71 database; other three lines calculated from published tables of occupation, Census of Canada 1871, Volume 2, Table XIII.

Table 5
Participation rates in industrial work, 1871
% total population in each gender/age group

	CANADA	Ontario	Quebec	NB	ns
Men in all firms Men in 12-month firms	16.3	16.9	16.2	17.6	12.8
	10.3	11.8	10.5	7.0	6.2
Women in all firms Women in 12-month firms	2.6	2.5	3.2	2.2	0.8
	2.0	2.0	2.7	1.3	0.7
Boys in all firms Boys in 12-month firms	6.2 3.9	5.9 3.9	6.7 4.5	8.8 3.0	4.1
Girls in all firms	2.2	1.4	4.1	0.9	0.8
Girls in 12-month firms	1.8	1.0	3.7		0.5

Source: compiled from CANIND71 database and the published tables of age-groups of the population, <u>Census of Canada</u>, 1871, Volume 2, Table VII.

¹³ Reasons for the discrepancies between the industrial and occupational data are discussed in Elizabeth Bloomfield and G.T. Bloomfield, <u>Patterns of Canadian Industry in 1871: An Overview Based on the First Census of Canada</u> (CANIND71 Research Report 12, 1990).

Using the CANIND71 data of industrial employment, one can calculate more sensitive indices of participation in paid industrial work from place to place. Numbers of men, women, boys and girls reported as employees in industrial establishments to the demographic data for gender/age groups of the total population in order to calculate participation rates. Table 5 shows the mean participation rates of men, women, boys and girls in each province and Canada as a whole. We can also distinguish between the overall participation rates and adjusted rates based on the returns from those industrial establishments that operated a full 12 months. Apparently, a fair proportion of all employees did not work in industrial establishments throughout the full year before the taking of the census in early April 1871.

Table 6
Concentrations of female industrial workers by Ontario census sub-districts, 1871
where women formed at least twice the national proportion of women
in the industrial labour force and with at least 100 female workers and
ranked by number of female industrial workers

Census Sub-District	# Female Workers	percent total industri women	al workforce
Ontario			
Toronto: St Lawrence Ward	1,101	26.10	4.54
Toronto: St James Ward	441	25.63	4.27
Hamilton: St Patrick Ward	418	27.40	4.15
Ottawa: By Ward	228	35.93	1.82
Almonte Village, Ont.	203	32.78	4.60
Ottawa: Wellington Ward	179	30.76	1.44
Hope Township, Ont.	155	25.26	1.93
Ancaster Township, Ont.	145	31.91	2.36
Kingston: St Lawrence Ward	139	38.87	2.37
Hespeler Village, Ont.	129	25.47	22.85
St Marys Town, Ont.	122	28.54	1.74

<u>Source</u>: compiled from CANIND71 database. Rural districts with high proportions of women and girls engaged in domestic weaving or other handicrafts, have not been included here.

The significance of women and girls as industrial workers may be measured also in terms of the female share of the total industrial workforce. Clearly women and girls were outnumbered by men and boys in Canada's industrial establishments in 1871, as together they comprised under 15 per cent of the total industrial workforce. The female share of the industrial workforce could range as high as 32.4 per cent in the City of Montreal, 27.4 per cent in Quebec City, or 24.3 per cent in the City of Toronto. Proportions of women and girls in the industrial workforce of rural and frontier districts were usually well below 10 per cent. Table 6 lists Census Sub-Districts such as townships, towns, villages and city wards with at least twice the national mean share of women in the industrial workforce and at least 100 female industrial workers. The mill village of Hespeler in Waterloo County had the highest proportion in Ontario: women and girls made up over 48 per cent of the village's industrial workers. Women and girls formed more than one third of the local industrial workforce in several other

Ontario communities - Almonte in Lanark County, Ancaster Township in Wentworth County, and Hope Township (Campbellford) in Northumberland and Durham County.¹⁴

Size of Workplace

Most industrial establishments were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Only 15 per cent of Ontario workplaces reported more than five workers, though these larger businesses contributed larger shares of gross value of output and value added in manufacturing (Table 7). The proportion of larger workplaces in particular Ontario counties ranged from only 4 per cent in Grey County to 32 per cent in Wentworth County. Many industrial establishments had small values of production as well: more than one quarter Ontario's units produced less than \$500 worth of industrial output.

Table 7
Ontario industrial establishments, 1871
by firm size or numbers of employees per firm

	Establishments % total	Employment % total	Production % total	Value Added % total
Firm size # employees amall				
1	39.8	9.0	6.1	6.2
2 - 5 medium	45.3	28.5	29.9	25.7
6 - 50 large	14.1	40.1	44.2	44.6
50+	0.8	22.4	19.8	23.5
TOTALS	100.0	100.0	100.0	100.0

Workplaces reporting more than 50 employees have been defined as large factories (or manufactories if they used no steam or water-power), and those with between 26 and 50 employees as small factories (or manufactories). The presence of such larger workplaces is noted for particular counties.

Canada's leading 150 industrial enterprises ranked in the top one per cent ion the four measures of number of employees, value of fixed capital, gross value of output and value added. Ontario and Quebec each had 67 of these industrial leaders, and most were located in cities and towns. There were fourteen in Toronto, five in Hamilton, eight in Ottawa, three in St Catharines, two each in Ingersoll, Oshawa and Merritton. But some very large establishments were located in very small communities and unincorporated villages. Hiram Walker's distillery, the second largest industrial firm

¹⁴ For detailed analysis of women's industrial work in 1871, see Elizabeth Bloomfield and G.T. Bloomfield, <u>Canadian Women in Workshops</u>, <u>Mills and Factories</u>: <u>The Evidence of the 1871 Census Manuscripts</u> (CANIND71 Research Report 11, 1991).

in Ontario, was located in Walkerville, Essex County, a place with only 200 inhabitants. Gooderham and Worts' large flour mill was in Meadowvale, Peel County. Other examples include Patterson Brothers' agricultural implements at Patterson, York County and H.B. and S. Rathbun at Mill Point (later Deseronto), Hastings County. 15

Power Technology

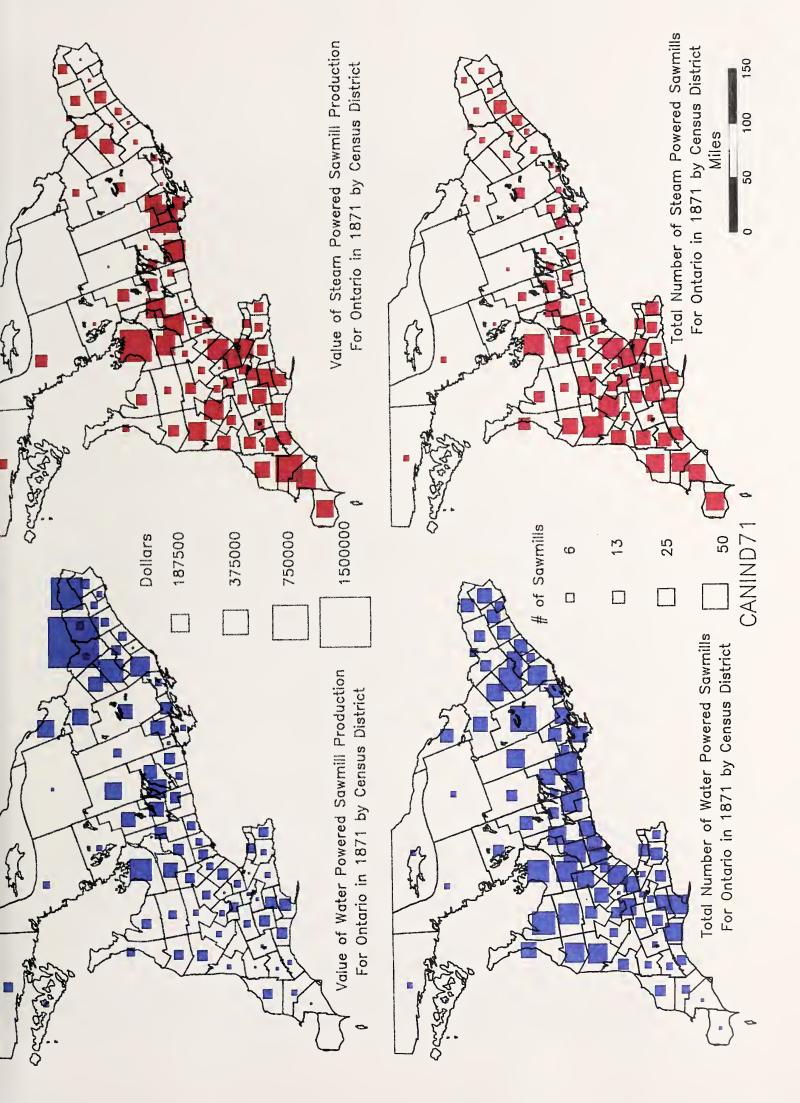
Information recorded in the 1871 census manuscripts for types of power and numbers of horse power units of non-manual sources of power has effectively become available for the first time as part of the CANIND71 database. We use the term "power" to describe the motive force derived from primary energy, and "powered establishment" refers to an industrial firm using power other than hand or manual power. The term "waterwheel" is used generally here (as it was in the early 1870s) to include not only the traditional overshot and undershot wheels but also the more modern breast wheels and turbines. Census data do not distinguish between the various types of waterwheel. The water/steam type refers to older water-powered establishments that had added a steam engine to supplement the usual power source in periods of low water flow.

Fewer than one in four of the industrial firms in Ontario in April 1871 reported using water or steam power. But such firms were disproportionately important in employment, investment and production. Water- and steam-powered enterprises employed just over half of all industrial workers, reported well over three-quarters of fixed capital invested in industry and accounted for over 77 per cent the value added in the processes of industrial production. He waterwheels powered more establishments than steam engines, but steam-powered establishments were more significant in numbers employed, value of output and added value. Steam power was notably more developed in Ontario than in the other provinces of Canada by 1871.

Within Ontario, there were marked regional variations in the use of steam and water power, illustrated in Plate 1 in relation to the important wood processing industry. These maps show the number of sawmills and the value of sawmill output, powered by waterwheels or powered by steam engines in 1871, in each of Ontario's 82 Census Districts. These statistical units provide a somewhat finer sense of the spatial contrasts between mainly water-powered activity in eastern and central parts of Ontario and steam-powered production in the southwest. Variations in the size of mill are implied by differences between the patterns of numbers of mills and total value of output for each type of power. What maps at this scale cannot show is the contrast between greater use of steam power in urban centres and the greater dependence on water power in rural areas.

¹⁵ See Elizabeth Bloomfield and G.T. Bloomfield, <u>Patterns of Canadian Industry in</u> 1871: An Overview Based on the First Census of Canada (CANIND71 Research Report 12, 1990) and <u>Industrial Leaders: The Largest Manufacturing Firms</u> (CANIND71 Research Report 8, 1990).

¹⁶ See G.T. Bloomfield and Elizabeth Bloomfield, <u>Water Wheels and Steam Engines:</u>
<u>Powered Establishments of Ontario</u> (CANIND71 Research Report 2, 1989), and "Waterwheels and Steam Engines in Ontario: Industrial Power Reported in the 1871 Manuscript Census" <u>Scientia Canadensis</u> 13, 1 (1989): 3-38.



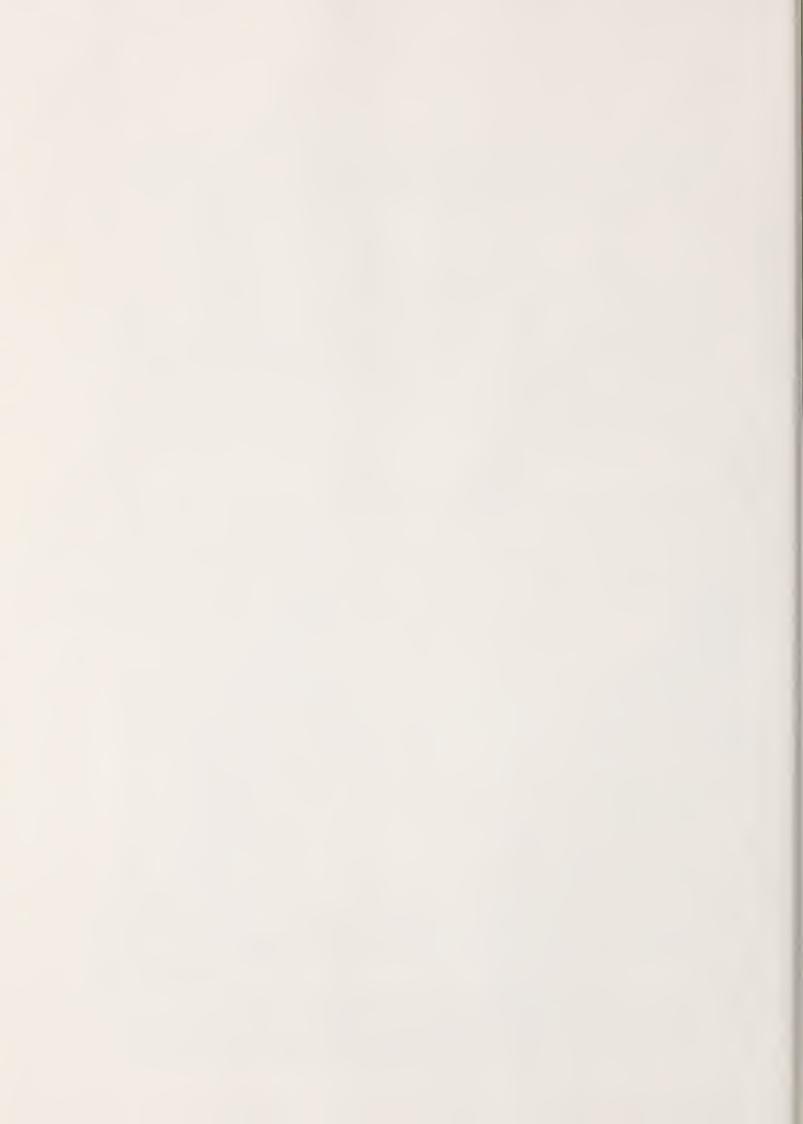


Table 8
Ontario: types of industrial power, 1871
percentages by various measures

Type of Power	Estabs	HP Force	Fixcap	Employmt	Productn	Value added
Hand	74.4		20.9	47.1	30.9	36.4
Horse	3.3	1.4	1.5	2.8	1.2	2.0
Steam	9.8	36.4	48.9	32.0	36.0	41.5
Water	11.9	58.2	26.0	16.3	28.6	18.2
Water/Steam	0.6	4.0	2.7	1.8	3.1	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: compiled from CANIND71 database

Urban Dominance of Industry

Urbanization as a process was clearly well established in southern Ontario by 1871. At this time the 110 incorporated places had a population of 354,985 or 21.9 percent of the provincial total. If the 139 additional, unincorporated central places with over 500 population are included, the "urban" population is increased to 460,064 or 28.4 percent of the total. Preliminary geographical analysis of the 1871 industrial census data suggests that a significant proportion of industrial activity was concentrated in urban places. Urban establishments accounted up to three-fifths of the added value of manufacturing (Table 9). Nearly half the industrial labour force was counted in urban centres, with higher proportions of women and children employed in industry. So it is not surprising that the Ontario counties with higher urban proportions of their people living in urban places were also more industrialized. Urban industrial establishments were generally larger and more productive than rural ones, had more fixed capital investment and were more likely to use steam power. Urban workers also earned more and tended to be employed for more months in the year.

The degree of urban concentration of industrial activity varied by sector. Over 75 per cent of tobacco products, primary metals, printing, miscellaneous products, clothing, furniture and metal fabricating, machinery and paper, utilities and construction, were located in urban centres. The lower urban shares of the food, textile, wood and non-metallic mineral sectors reflect the large numbers of grist and flour mills, cheese factories, woollen mills, carding and fulling mills, sawmills and lime kilns in rural areas. Industry groups typical in rural areas were often processing or primary manufacturing, and those concentrated in urban areas were fabricating or The distinction is nicely illustrated in the contrasting secondary manufacturing. distribution patterns of sawmills and furniture-makers in 1871. Sawmills that processed wood products close to the forest sources were characteristically found in rural areas. Furniture factories, where the sawn lumber was fabricated by more intensive application of labour into goods for consumers, were more often located in the urban centres. Even in industry groups or sectors that were overwhelmingly rural, it is notable that urban establishments were more productive than those in rural areas in every sector except

mining and quarries. If all industry groups are considered together, urban firms were twice as productive as the norm. 17

Table 9
Urban percentages of industrial activity in Canada and provinces, 1871

	CANADA	Ontario	Quebec	NB	NS
Establishments	23.0	28.4	24.5	10.6	4.2
Fixed capital	56.9	62.5	61.3	21.7	24.0
All employees	48.7	55.4	54.3	20.9	14.3
Value of output	56.9	58.8	64.6	28.8	23.6
Added value	57.9	60.4	66.6	27.9	25.4

Source: compiled from CANIND71 database.

Industrial activity was far more important to some urban communities than to others. Some were veritable "hives of industry", a phrase used with pride by various Ontario towns and villages in the later nineteenth century. One simple measure of the significance of industry to a community is the percentage of the total population of a city, town or village that was employed in industry. For Ontario's 110 centres in 1871, the mean percentage of the Ontario urban population employed in industry was 14.7, but this value ranged widely in every size-class, but especially among the smaller urban centres. Larger Ontario cities and towns with above-average shares of their people working in industry were Hamilton (21.6 per cent), Toronto (18.9), St Catharines (17.9), Guelph (16.6), Brockville (16.6) and Brantford (15.5). In mill towns and villages, such as Hespeler, Portsmouth, Almonte, Carleton Place and Smiths Falls, more than one in four of the people employed in factories, mills or workshops. At least one in every five of the people of the somewhat larger towns of Oshawa, Dundas and Galt worked in industrial establishments.

A closer look at some of the most industrialized centres reveals the presence of leading enterprises or clusters of firms in particular industrial sectors, with at least one in four of industrial workers employed in a particular sector. The largest group of such towns specialized in the primary processing of wood products, each being dominated by one or more large sawmills. Ottawa had six sawmills employing at least 50 workers and producing \$100,000 each, and there were single, very large mills in smaller communities such as Carleton Place, Hawkesbury, Trenton, Barrie, Goderich, Collingwood, Arnprior and Orillia. Several Ontario towns specialized in textiles -- Almonte had five woollen mills, Hespeler three, and Lanark, New Edinburgh and Preston one each. Paris was dominated by knitting mills.

¹⁷ Elizabeth Bloomfield and G.T. Bloomfield, <u>The Ontario Urban System at the Onset of the Industrial Era (CANIND71 Research Reports #3, 1989).</u>

¹⁸ Elizabeth Bloomfield, "Using the 1871 Census Manuscript Schedules: A Machine-Readable Source for Social Historians", <u>Histoire sociale</u> 19 (1986): 427-441.

Perhaps more remarkable was the specialization of several Ontario towns in more fabricated industrial products. Some specialized in the "metal trades". In Oshawa, for example, over 60 per cent of the 732 industrial workers were employed by two firms - the Joseph Hall Company that made steam engines, boilers and farm machinery, and William H. Gibbs' furniture factory. Gananoque was distinctive for several firms in metal fabricating, machinery and transportation equipment. One made rivets and castings; another nails and hinges; three manufactured tools, including shovels, forks and files; two made agricultural implements; and three made parts for carriages and wagons. The village of Smiths Falls and the town of Ingersoll each had two notable foundry enterprises making agricultural implements, while Mitchell, Newcastle, Aurora and Brampton were each dominated by a single enterprise in this sector. Guelph and Fergus were notable for the manufacture of sewing machines. Port Hope, St Marys and Picton had measurable specializations in clothing, Bowmanville and Berlin in furniture, and Brockville in stoves. Three towns specialized in the making of transportation equipment: Brantford in railways, Oakville in carriages and Port Dalhousie in boatbuilding.

1871 Census Data and Ontario Counties

The 1871 census enumerators recorded for each establishment the Census District, Census Sub-District, and Census Enumerator's Division. Only a few of the manuscript census schedules include the finer details of precise location or address of the industrial establishments. The CANIND71 project team has prepared detailed maps of Census District and Census Sub-District boundaries in 1871, with the ability to reconstitute the manuscript census data for counties. No maps or descriptions survive of the boundaries of Census Enumerators' Divisions. Information for Ontario industrial establishments can be analyzed either in the framework of Census Districts (CDs) and Census Sub-Districts (CSDs) or in the geographic and municipal county units of the period. By using the county framework, we may also correlate the manuscript census details with evidence from other contemporary sources in order to attain a better understanding of Ontario's economic landscape.

In 1871 the Province of Ontario covered some 101,715 sq. miles and had a population of 1,620,851. The southern limits of the province were clearly defined by the lake shorelines, the St Clair, Detroit, Niagara, St. Lawrence and Ottawa rivers. In the north the boundary was defined by the watershed or height of the land between the Great Lakes and Hudson Bay drainage systems. These outer limits were basically established by the Treaty of Paris 1763 and sustained by subsequent legislation to Confederation.

While the population of southern Ontario was widely distributed there were substantial variations in densities from the average of 42 persons per square mile. A cross section of territory from Toronto along the Sydenham Road to the Bruce Peninsula showed a rapid decline in density from 6,030 in the City of Toronto to 65 persons per square mile in Etobicoke Township, 29 persons per square mile in Holland Township, Grey County and only 34 p.s.m. on the fringe of settlement in Albemarle and Eastnor Townships.

Low population densities on the periphery of settlement and long distances across Ontario did not mean total isolation. There were over 1,700 post offices in Ontario in October 1870 and few households or businesses were more than five miles

from a post office outlet. Information and news was disseminated by about 190 weekly newspapers published in 128 places. Urgent messages could be transmitted and received from the 272 Ontario offices of the Montreal Telegraph Company. A basic railway network connected most of the larger urban centres and, incidentally many smaller places. By mid-1870 the Ontario railway network covered 1,422 miles and served about 227 stations.

By 1871, southern Ontario had a well-established settlement system. At the local scale, there were hundreds of small places with populations of fewer than 250 inhabitants. Such places provided the basic connections between farms and rural industrial establishments with the larger region and world beyond the local area. A post office usually combined with a store provided the communication and commercial linkages, while a school house and churches gave a sense of social cohesion to the local community. Economic activities centred around a blacksmith, flour/grist mill, saw mills and other types of small workshops. In physical terms, the buildings of the smaller centres might be clustered around the nucleus of a crossroads or a water-powered mill site or, in the very smallest examples, could be dispersed along a concession road with the functions being a mile or so apart.

All the smaller places were connected by road or water with larger centres which contained a broader range of services. Villages ranged in population size from 250 to 2,000; some were incorporated, others not. Many villages had post offices of an higher order which could issue and cash money orders, an office of the Montreal Telegraph Company, small merchants and more industrial establishments. The use of the term "town" was generally confined to places with the formal incorporated status of town. In functional terms, most of the places with over 500 population might be regarded as towns since they included functions such as newspapers, some form of banking and transportation and communication linkages with larger areas. 19

Plate 2 gives a good sense of the patterns of settlement and circulation in southern Ontario in 1871. Data for this map come from the annual reports of the Postmaster-General which included full details of hundreds of contracts awarded for mail service throughout Canada. County boundaries are shown in black. The circles representing central places with post offices are drawn proportional to the annual value of postal receipts in each case. The green lines show how the network of roads used as postal routes connected the countryside with villages, towns and cities. Roads are distinguished from railways and the different frequencies of the postal service along roads are also indicated as to whether contractors travelled specific routes six days a week, 2-5 times a week (most commonly 3 times a week), and once a week. Some mail service routes were 70 to 80 miles long, others only two or three miles to the nearest railhead. Probably the 1871 network represents the maximum extent of long-distance road routes, as this was a peak period of rural settlement. In the next few decades, road services were replaced by railways and rural populations later declined. The map also shows areas which were relatively empty, such as the large area of Precambrian Shield, the Niagara Escarpment, and areas of poor drainage in the far southwest.

¹⁹ For a discussion and detailed lists of over 2,000 Ontario central places, see G.T. Bloomfield and Elizabeth Bloomfield, <u>Ontario Central Places: A Gazetteer Compiled from Contemporary Sources</u> (CANIND71 Research Report 13, 1990).

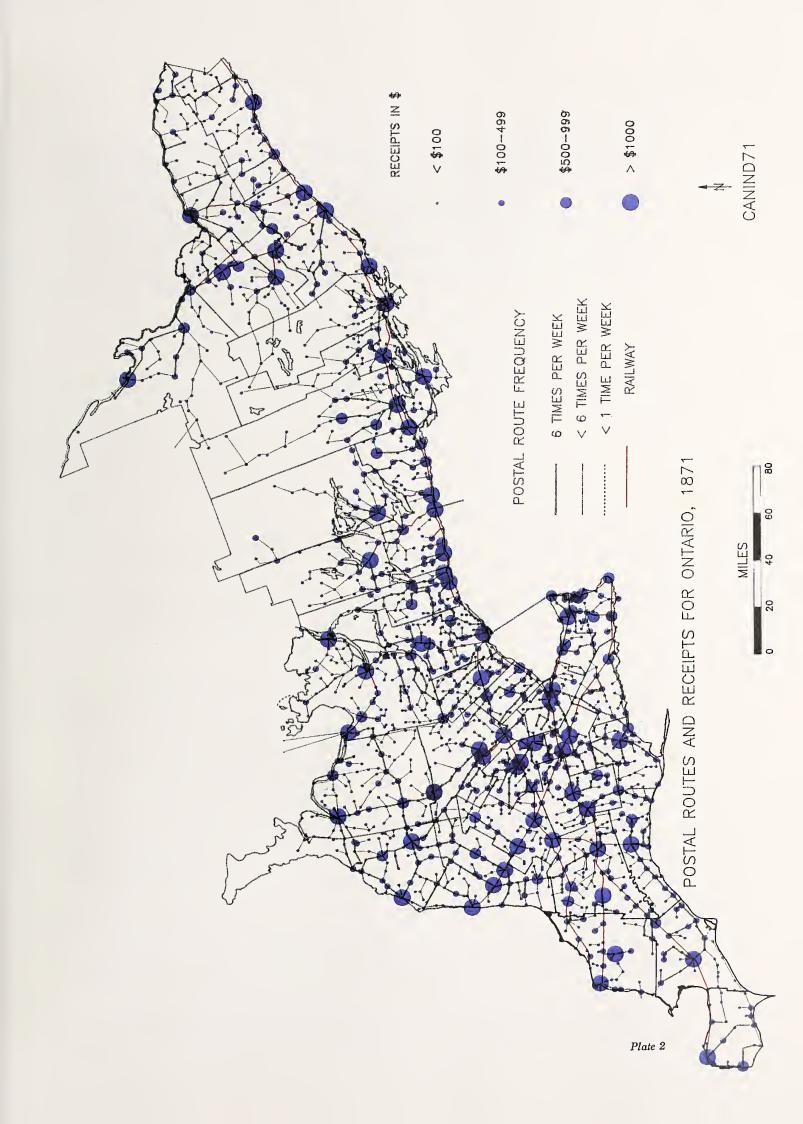




Table 10 presents summary data on Ontario settlement system. There was a general symmetry of places at the upper end of the hierarchy. Toronto (population 56,092) was over twice the size of Hamilton (26,716). The three other cities ranged in size from Ottawa (21,545) to London (15,826) and Kingston (12,407). Seven towns-Chatham, Brantford, St Catharines, Guelph, Port Hope, Belleville and Brockville, had populations in excess of 5,000. All the larger centres had achieved incorporated status by 1871. For the 213 smaller places, between 500 and 2,500 population, only one-third had become incorporated by 1871 although many would become incorporated during the next decade.

Table 10
Ontario: size classes of central places, 1871

			Inco	rpor	<u>ated</u>
Population Size Class	No. of Places	Total	C	T	V
50,000+	1	1	1	-	-
25,000-49,999	1	1	1	_	-
10,000-24,999	3	3	3	-	_
5,000-9,999	7	7	-	7	_
2,500-4,999	24	24	_	21	3
1,000-2,499	81	45	-	10	35
500-999	132	27	-	2	25
250-499	209	2	-	-	2
<250	1,348	_	-	-	-
No population given	<u>260</u>	_	=	=	=
TOTAL	2,066	110	5	40	65

Notes: Sources: C-City, T-Town, V-Village, Terms defined by municipal legislation. Census 1871 for all incorporated places; <u>Lovell's Canadian</u> <u>Dominion Directory 1871</u> for unincorporated places.

Counties have always been the most important middle-scale areas for defining space. In 1871 there were 42 geographic counties and 36 municipal counties. The difference between the two types was the existence of five united counties (Northumberland and Durham; Lennox and Addington; Leeds and Grenville; Stormont, Dundas and Glengarry; and Prescott and Russell). All counties were agglomerations of townships and incorporated urban places. Municipal counties did not have jurisdiction over the cities and separated towns within their boundaries. The boundaries of the municipal counties of 1871 are shown in Plate 4. Since counties ranged in size from 269 sq. miles (Peel) to 2,389 sq. miles (Renfrew) and varied greatly in population density, the electoral counties (or districts) were often substantially different from the municipal counties. In 1871 there were 82 Provincial and Federal Electoral Districts. ²¹

²⁰ Separated towns were generally found in counties with rival urban centres. Examples include Smith's Falls (Lanark), Prescott and Gananoque (Leeds and Grenville), Trenton (Hastings), Ingersoll (Oxford), St Marys (Perth).

For details of the geographic counties and the Census Districts of 1871, see G.T. Bloomfield, <u>Boundaries of Canadian Census Units in 1871</u>, (CANIND71 Research Report 10, 1990).

The basic similarities of areas and boundaries between 1871 and the present day reflect the general maturity of the system as established by 1871. Relationships between the land survey systems and other types of areas were clearly established in Ontario by the time of the first Census of Canada. The arrangement of lot, concession, township and county was firmly imprinted on the landscape and clearly differentiated geographical space in southern Ontario from Quebec as well as from the neighbouring American states.

Northern Ontario (Census Districts 83 to 90) was still virtually unsettled in 1871. The enumerated population of 15,728 represented only 0.97 percent of the provincial population. Some districts had been defined by the time of the census, namely Muskoka and Parry Sound, but the distinctions between Algoma and Nipissing districts were still vague. District boundaries and the judicial administration in northern Ontario were not clarified until the late 1880s. While the settlement system of southern Ontario was well established, that of the north was still very rudimentary. Bruce Mines, with an estimated population of 1,250, was the largest place. Gravenhurst and Muskoka had populations around 400. Fort William, the most westerly settlement in the province, had an estimated population of only 70.

Plate 3 is included as a sample of the kinds of maps that may now be produced electronically from hundreds of variables in the CANIND71 database and the digitized files of boundaries of Census Districts, Census Sub-Districts and counties, together with other contemporary spatial information. The Leeds-Lanark region comprises a large tract of eastern Ontario, stretching from Gananoque on the St Lawrence River in the south to Ottawa on the Ottawa River in the north. The lighter black lines indicate boundaries of Census Sub-Districts, usually townships or incorporated urban places; bolder black lines delimit counties. All of Leeds and Grenville County and Lanark County are included, as well as the western two-thirds of Carleton County. Railways and rail stations are shown, including the Grand Trunk running the along the length of the St Lawrence shore, with the St Lawrence and Ottawa extending north from Prescott to Ottawa, and the Brockville and Ottawa running northwards through the centre of the region, with branches from Smiths Falls west to Perth and from Carleton Place northeast to Ottawa. The navigable waterways of the Rideau system are also shown. A glance at the relevant portion of Plate 2 shows that this region was the most developed part of eastern Ontario in 1871. The four small maps illustrate the distribution by Census Sub-Districts of establishments in four important major groups or sectors -- sawmills, flour mills, metal-working and machinery shops, and textile mills.

In the next section, following the county map, we present four-page profiles of each municipal county in southern Ontario. Each profile consists of one page of text summarizing the structure and characteristics of industry in that county, such as scale of operations, location and distribution, significance of urban centres, industry types, use of water and steam power, and leading firms. There is a map of each county with its internal census units and railway lines and a set of bar graphs of the structure of major industry groups in the county (and any larger urban centres with at least 2,500 population) compared with Ontario as a whole. A matching table provides data and percentages for each industry group in that county. We generalize about the fewer than 100 industrial establishments in northern Ontario in a single profile of the "Northern Districts" at the end of the series of counties in southern Ontario.

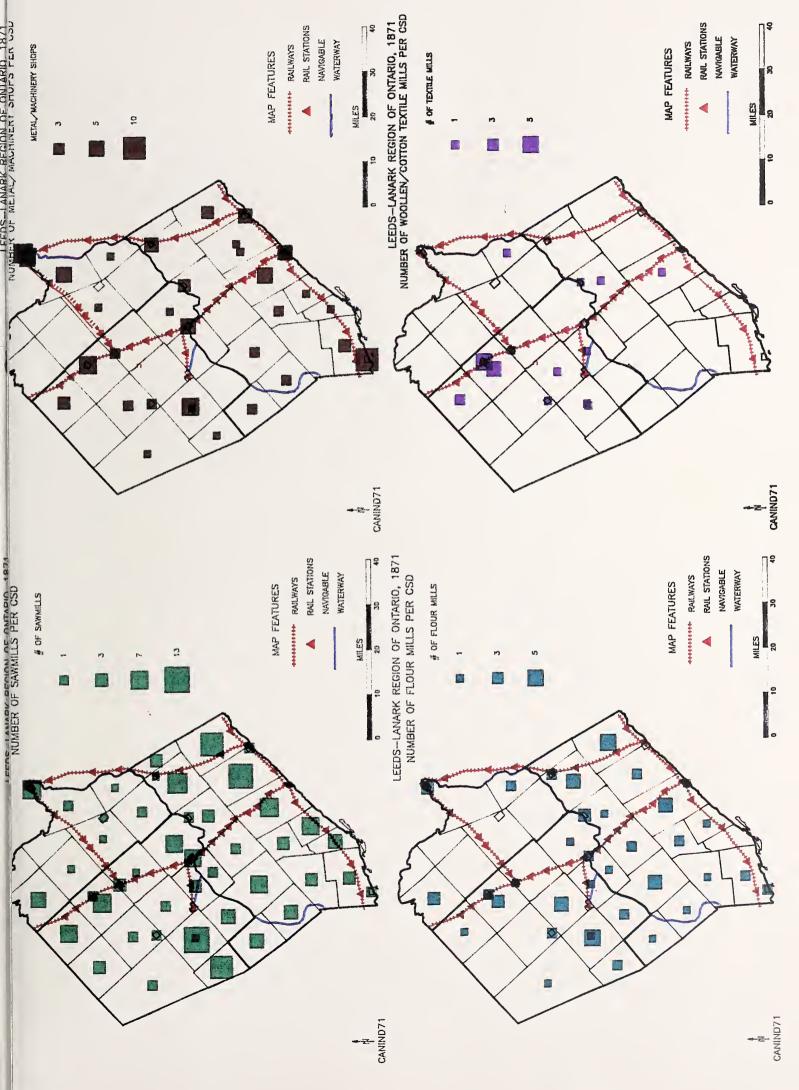


Plate 3



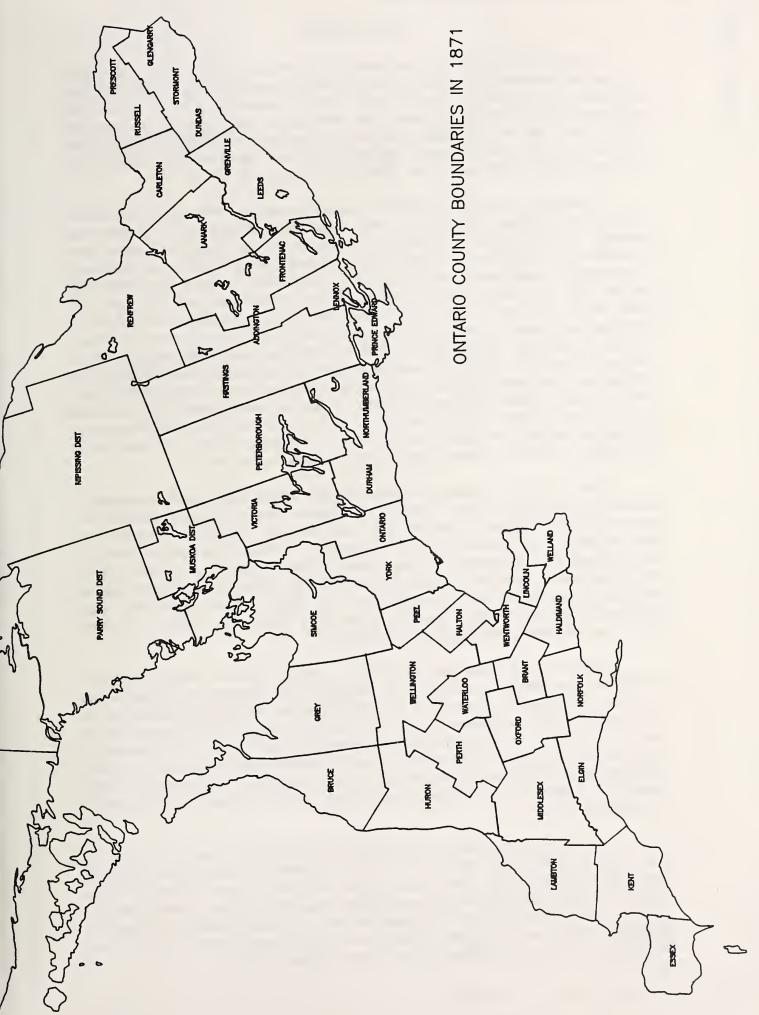


Plate 4

BRANT COUNTY

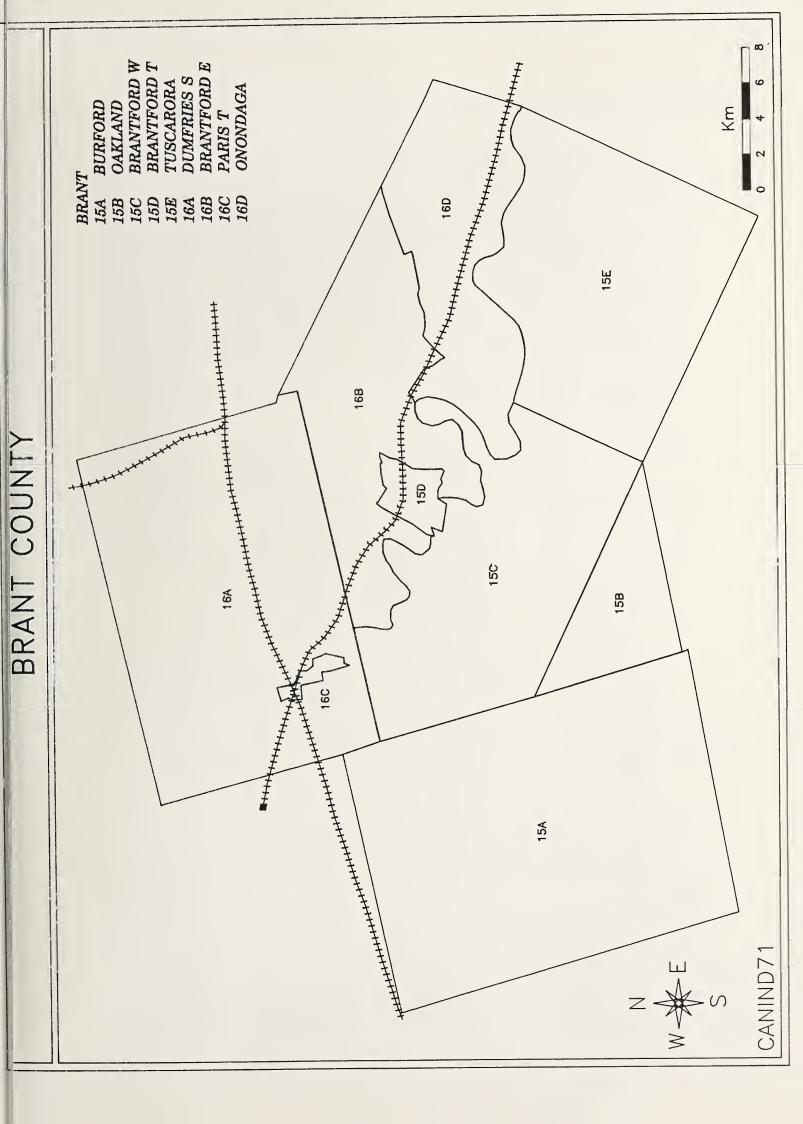
Part of the maturely developed zone of the province by 1871, Brant County was more densely populated in its rural areas and more urbanized and industrialized than most of southern Ontario. The level and variety of industrial activity reflected the agricultural productivity of the county, the water-power resources at points along the Grand River and its tributaries, and the early railway connections of Paris and Brantford via the Great Western Railway (1853) and the Brantford, Buffalo and Goderich Railway (1855, part of the Grand Trunk system by 1871).

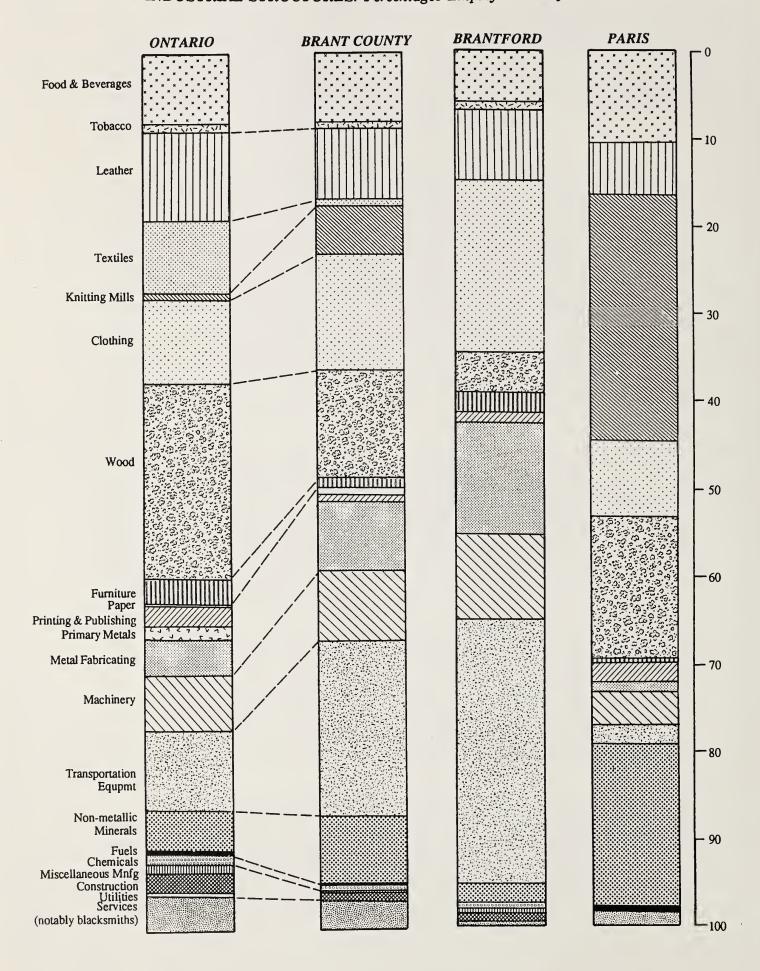
When Brant County's industrial structure is compared with that of Ontario as a whole, we find that several sectors were distinctively stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). Transportation equipment, metal fabricating, non-metallic mineral processing and knitting mills were sectors which in Brant County employed at least 1.5 times their share in all of Ontario. The diagram also illustrates the industrial structures of Brantford and Paris in relation to those of Brant County and the whole province. Compared with other towns and cities of Ontario, Brantford and Paris combined aboveaverage industrial activity with a fairly specialized industrial structure. Some of the differences in industrial structure between the towns and whole county reflect urbanrural contrasts. Textile mills (and other cloth production) were typically located in rural areas and small villages, while the making of clothing was concentrated in urban places. Construction activity was also more intensive in the larger towns and cities, while blacksmiths were more typical in the countryside than in the towns.

Most of Brant County's industrial establishments were small craftshops—blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. More than three in every four workplaces reported five or fewer employees, but this proportion was lower in Brant County than in Ontario generally. Rural industrial employees in Brant County were recorded in workplaces which were more artisanal, smaller and less dependent on water or steam power than in rural Ontario generally. Water power was more significant in Brant County, supporting 40 per cent of industrial output, and steam power was less important, than in all of Ontario.

Industry was concentrated in the county town of Brantford, where 15 per cent of the town's population were employed in industrial mills, factories or workshops, and in Paris, where industry occupied 21 per cent of the people. Together Brantford and Paris accounted for nearly three of every four industrial workers in the county and 82 per cent of its gross value of industrial production. All the factories or mills employing more than 25 workers or with output of more than \$30,000 were in the two towns. In Brantford and Paris, more than two in every five workers were employed in larger factories employing at least 50 hands, more than 1.5 times the share in Ontario urban centres generally.

The Grand Trunk Railway workshops was the largest industrial workplace in Brantford, employing 315 or one in four of all industrial workers and reporting production worth \$326,000. The foundries of the Waterous company, William Buck and Bradford Tisdale were the other large metal fabricating and machinery enterprises. The largest enterprises of Paris were the knitting mills of John Penman and Adams & Hackland which each employed over 50 hands (and reported gross output of over \$80,000 in 1871, and the plaster of Paris mill of Thomas Coleman.





		OBSERV		FORCE	N N	FIXCAP	<u> </u>	TOTEMP	<u>-</u>	SUMPROC	ည	VADD	^
		SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC
COUNTY	SEC												
BRANT	5.01	44	12.0	607	37.3	169705	14,1	184	8.0	1265523	38.7	282288	18.5
	5.02	2	0.5			800	0.1	13	0.6	12000	4.0	0099	0.4
	5.04	62	16.9	35	2.2	50795	4.2	186	8.1	250805	7.7	136992	9.0
	5.05	60	2.2	48	3.0	16065	1.3	23	1.0	15350	0.5	8750	9.0
	5.06	2	0.5	26	3.4	38000	3.1	127	5.5	166000	5.1	87120	5.7
	5.07	34	9.3			77525	6.4	298	12.9	257375	7.9	95033	6.2
	5.08	48	13.1	539	33.1	121750	10.1	281	12:2	248290	7.6	135341	8.9
	5.09	14	3.8			8015	0.7	37	1.6	20410	9.0	16701	1.1
	5.1		0.3	80	4.9	12000	1.0	11	0.5	11000	0.3	8000	0.5
	5.11	*	1.1			17800	1.5	23	1.0	34200	1.0	20600	1.3
	5.12		0.3	2	0.1	400	0.0	1	0.0	120	0.0	80	0.0
	5.13	18	4.9	62	3.8	68250	5.7	175	7.6	163998	5.0	108437	7.1
	5.14	10	2.7	71	4.4	83100	6.9	183	7.9	190900	8.8	152925	10.0
	5.15	41	11.2	45	2.8	463310	38.4	462	20.0	425862	13.0	312825	20.5
	5.17	20	5.4	89	4.2	48150	4.0	174	7.5	114210	3.5	81584	5,3
	5.18		0.3	10	9.0	4000	0.3	4	0.2	5112	0.2	4412	
	5.19	2	1.4	•		10665	6.0	16	0.7	26540	0.8	22835	1.5
	5.2	4	1.1	٠		009	0.0	9	0.3	4090	0.1	1965	0.1
	9	4	1.1	4	0.2	2200	0.2	21	0.9	13200	0.4	11400	0.1
	8	1	0.3	٠		200	0.0	1	0.0	200	0.0	155	0.0
	10	43	11.7	٠	•	13505	1.1	79	3.4	43150	1.3	33625	2.2
ALL		367	100.00	1627	100.0	1206835	100.01	2305	100.0	13268335	1100.0	1527668	100.0

-- COUNTY-BRANT ---

BRUCE COUNTY

With many of its townships still undergoing settlement, Bruce County was part of Ontario's pioneer fringe in 1871 and reached its maximum rural population in 1881. The county's average rural population density of under 28 persons per square mile was about half that of the most maturely settled townships of southern Ontario. Like only four other counties in southern Ontario, Bruce County had no railways at all by 1871.

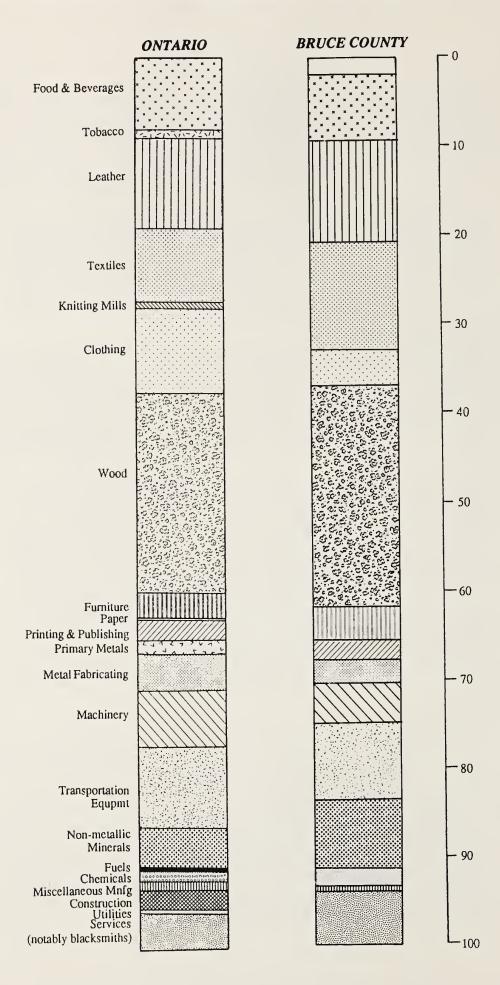
Bruce County was less industrialized than other parts of the province. The mean value of industrial production per capita (\$23.52) was significantly lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 2.2 in Bruce compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also significantly lower - \$2,117. compared with \$5,516.

The county was overwhelmingly rural: only one in twenty of its total population of 48,515 lived in the small incorporated villages of Kincardine (population 1,907) and Southampton (858). Of these, only Kincardine had any industrial activity but ranked well below the Ontario mean for degree of industrialization and lacked any industrial specialization or leading enterprise. Paisley with about 1,000 people, Walkerton with about 1,200, and Port Elgin with 750 were not yet incorporated in 1871.

When Bruce County's industrial structure is compared with that of all Ontario, the mix of industry types is found to be characteristic of rural areas. The diagram overpage has been designed to show these as clearly as possible, using major industry groups (SECs in the database). The unshaded section at the top of the county bar refers to mineral extraction. Wood processing, the largest industrial sector in Bruce as in Ontario generally, was located outside urban areas and often on the margins of settlement. Textile production, in which Bruce County had 1.5 times the Ontario proportion, was usually located in rural areas and small villages. The making of clothing, typically concentrated in urban centres, was weakly represented in Bruce County. Non-metallic minerals (including lime kilns, and the making of bricks, tiles and pottery) and blacksmiths were relatively more important in the county than in Ontario as a whole.

Most of Bruce County's industrial establishments were very small craftshops—blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Ninety-four per cent of workplaces in the county had five or fewer workers, a higher proportion than in Ontario generally. No workplaces had more than 23 employees. Rural industrial employees in Bruce County were recorded in workplaces which were more artisanal, smaller and more dependent on hand power than in rural Ontario generally. Waterwheels, which supported 39 per cent of industrial output, and manual power (36 per cent) were more significant and steam engines much less important in Bruce County than in Ontario generally.

0 5 10 15 20 Æ BRUCE COUNTY 27D 27H 286 28D 28F 28E 27C **27**G 28B 28C 28H **27B** 28A 27E 27A 27F f CARRICK KINCARDINE TP SOUTHAMPTON KINCARDINE V LINDSAY/BURY ALBEMARLE/... GREENOCK ELDERSLIE CULROSS SAUGEEN KINLOSS HURON AMABEL BRANT ARRAN BRUCE CANIND71 27B 27C 27D 27E 27F 27G 27H 28A 28B 28C 28C 28E 28F 28G 28H



	 	OBSERV).	FORCE	M	FIXCAP	a.	TOTEMP	<u>a</u>	SUMPROC	200	VADD	
		SUM	PERC-	SUM	PERC-	SUM	PERC- BNT	SUM	PERC-	NOS	PERC- ENT	NDS	PERC- ENT
COUNTY	SEC												
BRUCE	4	1	0.2	•	•	10000	1.9	12	1.0	25000	2.2	23500	4.7
	5.01	38	7.1	808	27.5	148650	27.9	90	7.6	405047	35.5	92489	18.6
	5.04	67	12.4	44	1.5	32640	6.1	141	11.9	135579	11.9	73867	14.9
	5.05	107	19.9	156	5.3	37133	7.0	140	11.8	82405	7.2	23687	4.8
	5.07	18	3.3		•	5310	1.0	48	4.0	22878	2.0	8481	1.7
	5.08	112	20.8	1802	61.2	185500	34.8	302	25.5	228539	20.0	114927	23.1
	5.09	18	3.3	24	0.8	8430	1.6	43	3.6	21350	1.9	17288	3.5
	5.11	9	1.1		0.0	8300	1.6	28	2.4	14800	1.3	11200	2.3
	5.12	1	0.2	-	•	200	0.1	П	0.1	1000	0.1	700	0.1
	5.13	16	3.0	٠	•	10040	1.9	29	2.4	19626	1.7	10908	2.2
	5.14	19	3.5	64	2.2	24150	4.5	51	4.3	52046	4.6	36953	7.4
	5.15	46	8.5	33	1.1	38050	7.1	109	9.2	55965	4.9	37405	7.5
	5.17	27	5.0	11	0.4	6895	1.3	93	7.8	31952	2.8	16189	3.3
	5.19	8	1.5	•	•	2870	0.5	18	1.5	6920	9.0	3806	0.8
	5.2	3	9.0	•	·	1200	0.2	4	0.3	1300	0.1	975	0.2
	9	1	0.2	•	•	200	0.0	4	0.3	009	0.1	200	0.1
	80	1	0.2	٠	•	70	0.0	1	0.1	200	0.0	450	0.1
	10	20	9.3	•	•	13705	2.6	72	6.1	35825	3.1	23196	4.7
ALL		539	539 100.0	2943	100.00	533643	100.001	1186	100.0	1186 100.0 1141332 100.0	100.0	496521 100.0	100.0

-- COUNTY-BRUCE ---

CARLETON COUNTY

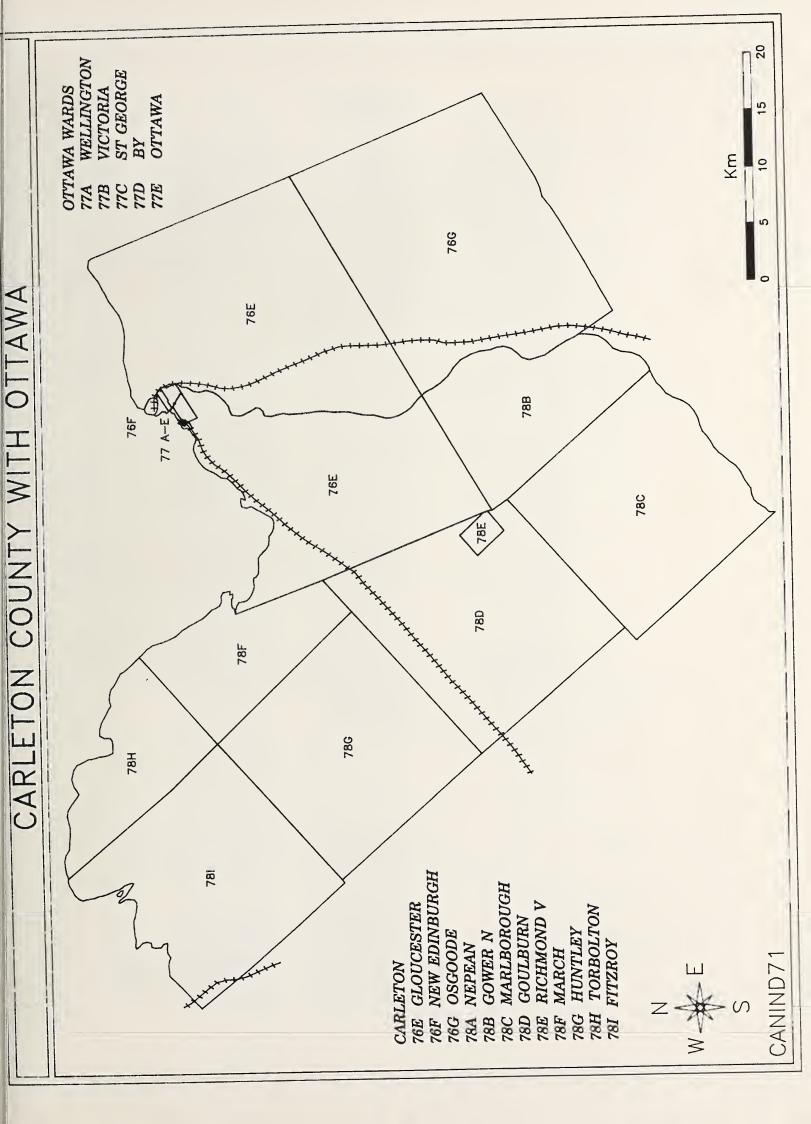
Carleton County was more industrialized than most other parts of the province, its mean value of industrial production per capita (\$100.02) being well above the mean for Ontario (\$74.00). The average number of employees per industrial establishment was 7.4 in Carleton compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also significantly higher -- \$9,812. compared with \$5,516. The county's economic landscape combined very substantial wood-based industries along the Ottawa and Rideau River waterways, some farm-based processing and rural services, and various forms of manufacturing related to Ottawa's urban and special capital functions.

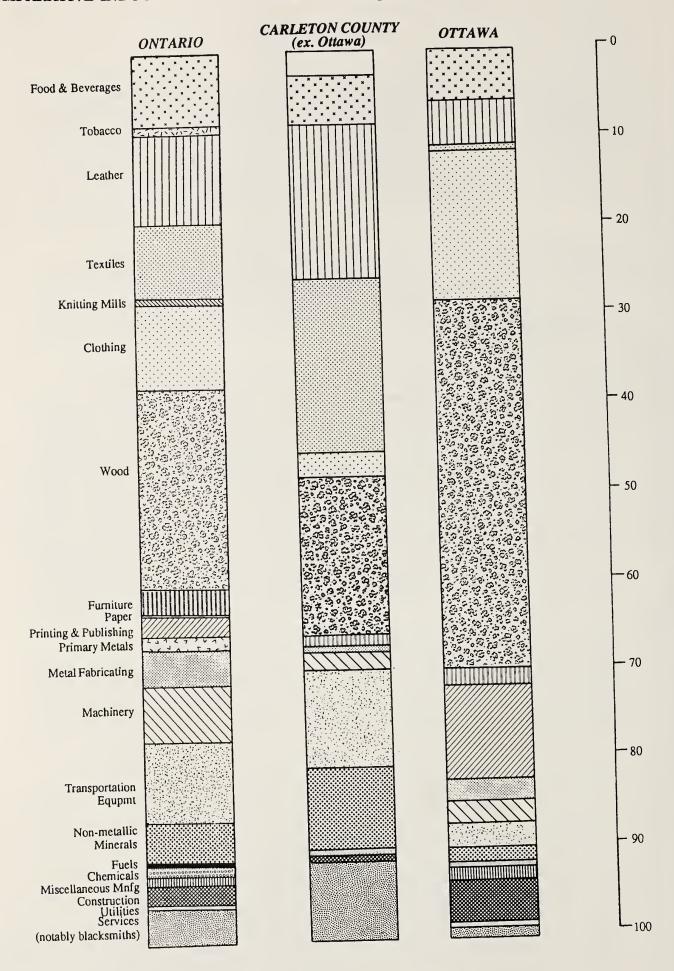
A large share of Carleton County's industrial activity was concentrated in Ottawa and the adjoining industrial village of New Edinburgh which accounted for two in five of the county's people but more than four in every five of its industrial workers and 86 per cent of its gross value of industrial production. Of Ottawa's total population of 21,545 in 1871, 3,224 or just under 15 per cent were employed in industrial mills, factories or workshops.

The industrial structures of Carleton County, Ottawa and the whole province, based on employment in major industry groups, are represented in the diagram overpage. The unshaded section at the top of the county bar refers to mineral extraction. Some of the differences in industrial structure between the city and remainder of the county reflect general urban-rural contrasts of the period. Textile mills (and other cloth production) were typically located in rural areas and small villages, while the making of clothing was concentrated in urban places. Construction activity was also more intensive in the larger towns and cities, while blacksmiths were more typical in the countryside than in the towns. Leather goods, textiles, non-metallic minerals, and blacksmithing were sectors which in Carleton County (outside Ottawa) employed at least 1.5 times their share in Ontario as a whole. Strong sectors in Ottawa were clothing, wood processing, printing and publishing, and construction; the city's metal and machinery sectors were weak when compared with other towns and cities of the period.

Ottawa's industrial structure was most remarkable for the strength of several huge sawmills powered by waterwheels on the Ottawa River. More typically in 1871, both wood-processing and water-powered industries were located in rural areas. Waterwheels supported nearly half the total industrial output in Carleton County which ranked first among Ontario counties for water-powered industrial production. Steam engines powered only a little over one tenth of the county's total industrial production.

Six Ottawa milling enterprises ranked among the top one per cent of Canadian industrial businesses in 1871. They were the firms of Bronson and Weston (with 300 employees and output of \$360,000), A.H. Baldwin (274 employed and \$276,000 output), Perley and Pattee (250 workers and \$330,000), James R. Booth (200 workers and \$250,000), Levi Young (100 employees and \$182,000), and J. McLaren (53 workers and \$150,000). T.M. Currier's planing mill which made sashes, doors and blinds for the construction industry, also ranked among Canada's industrial leaders in 1871, as did Isaac B. Taylor's printing business which published The Citizen. In addition, there were three large firms each employing at least 50 workers and 12 with between 26 and 50 employees. Women and girls made up only 15 per cent of Carleton County's industrial workforce compared with Montreal (34 per cent), Quebec City (27 per cent) or Toronto (24 per cent). But the proportions were higher in Ottawa's By Ward (35 per cent) and Wellington Ward (30 per cent).





		OBSERV	> - 1	FORCE		FIXCAP	A ₁	TOTEMP	<u>.</u>	SUMPROC	၁၀	VADD	
		MOS	PERC- ENT	SUM	PERC-	SUM	PERC- BNT	NOS	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC												
CARLETON	4	2	0.4	•		09	0.0	10	0.3	1000	0.0	790	0.0
	5.01	45	8.4	415	7.4	217700	9.8	190	4.8	1128413	21.5	203230	10.0
	5.04	107	20.0	39	0.7	46293	2.1	297	7.5	342584	6.5	169910	8.4
	5.05	61	11.4	272	4.9	68285	3.1	151	3.8	183179	3.5	00069	3.1
	5.07	54	10.1	-		32740	1.5	576	14.6	480361	9.2	179309	8.8
	5.08	48	9.0	4489	80.3	1298211	58.6	1485	37.5	1885981	36.0	642503	31.6
	5.09	13	2.4	51	6.0	6640	0.3	64	1.6	41920	8.0	26449	1.3
	5.11	6	1.7	45	0.8	222750	10.1	352	8.9	308617	5.9	208942	10.3
	5.13	20	3.7	110	2.0	24777	1:1	80	2.0	113858	2.2	61811	3.0
	5.14	10	1.9	141	2.5	85620	3.9	96	2.4	115660	2.2	81818	4.0
	5.15	47	8.8	19	0.3	37920	1.7	181	4.6	158234	3.0	104027	5.1
	5.17	24	4.5	10	0.2	12262	9.0	122	3.1	81230	1.6	54565	2.7
	5.19	3	0.6		-	2150	0.1	6	0.2	20700	0.4	8000	0.4
	5.2	17	3.2	•	-	15951	0.7	59	1.5	83175	1.6	53692	2.6
	9	11	2.1	•	-	10260	0.5	153	3.9	187275	3.6	102825	5.1
	7	1	0.2	•	-	1000001	4.5	14	0.4	30000	0.6	18800	0.9
	10	62	11.6	•	-	32125	1.5	116	2.9	77266	1.5	52815	2.6
ALL		534	534 100.0	5591	5591 100.0	2213744 100.0	100.01	3955	3955 100.0	5239453	100.0	5239453 100.0 2032486 100.0	100.0

--- COUNTY=CARLETON

ELGIN COUNTY

Elgin County had been settled in the very early nineteenth century and reached its peak rural population density in the early 1870s, but had not yet been affected by industrialization on a substantial scale. In 1871, only one railway crossed the county, connecting the county town of St Thomas with London to the north and the Lake Erie port of Port Stanley to the south.

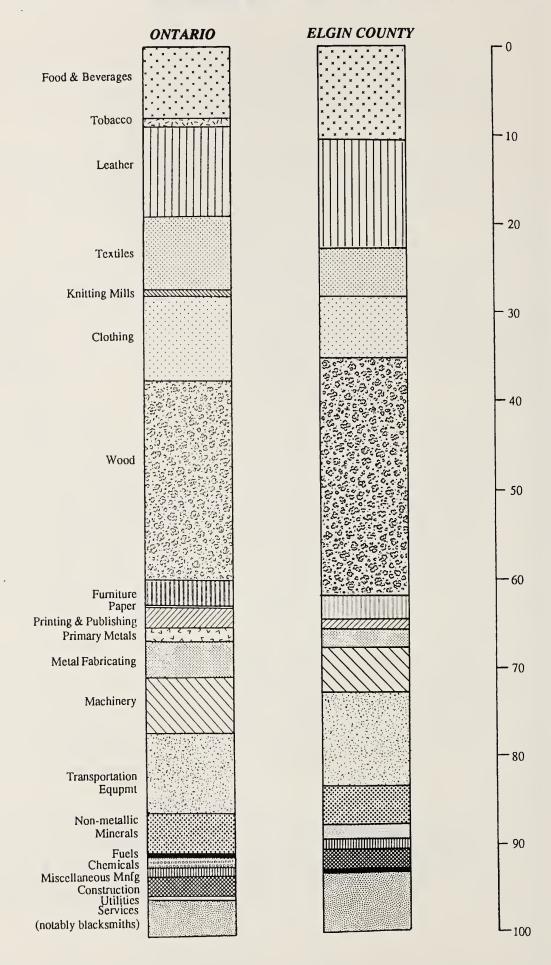
The county's mean value of industrial production per capita (\$45.17) was significantly lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 2.9 in Elgin compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also much lower -- \$3,005. compared with \$5,516.

Of its total population of 33,666, only 8 per cent lived in the incorporated centres of St Thomas (population 2,197) or the village of Vienna (593). Three unincorporated villages had larger populations than Vienna -- Aylmer with about 1,400 people, Port Burwell with about 1,300, and Port Stanley with about 900. But these small centres were quite unremarkable for their industrial activity. As the largest industrial place, St Thomas reported 293 workers or 13 per cent of its population in industry; 75 of these were in the clothing sector and 47 in leather.

When Elgin County's industrial structure is compared with that of all Ontario, the mix is found to be typical of rural areas. The diagram overpage has been designed to show these as clearly as possible, using major industry groups (SECs in the database). Wood processing, the largest industrial sector in Elgin as in Ontario generally, was located outside urban areas and often on the margins of settlement. In Elgin County, sawmilling and wood processing coexisted with processing of farm products in grist mills and tanneries. Textile production, usually located in rural areas and small villages, was notably underrepresented in the county. While metal processing and fabricating and machinery were weaker than generally in Ontario, the manufacture of transportation equipment was stronger. Blacksmiths were relatively more important in the county than in Ontario as a whole.

Virtually all of Elgin County's industrial establishments were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Eighty-eight per cent of workplaces in the county had five or fewer workers, a higher proportion than in Ontario generally. Elgin County had none of Canada's industrial leaders in 1871. Indeed, only two establishments reported more than 25 employees -- D. McIntosh's cooperage in St Thomas and the McIntosh foundry in Southwold Township.

Industrial employees in Elgin County were recorded in workplaces which were more artisanal, smaller and more dependent on hand power than in Ontario generally. Both waterwheels and steam engines were less significant in Elgin County, manual power unaided by inanimate energy accounting for 47 per cent of the county's industrial output, compared with a mean of only 31 per cent across the province.



		OBSERV	2	FORCE	H	FIXCAP		TOTEMP	ę.	SUMPROC	ည္	VADD	
		SUM	PERC- ENT	SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC												
ELGIN	1		0.2	30	1:1	200	0.0		0.1	5250	0.3	1050	0.1
	5.01	67	13.2	564	21.5	137935	28.7	145	10.0	432934	28.5	96791	13.7
	5.04	88	17.4	52	2.0	38900	8.1	178	12.3	199756	13.1	98026	13.9
	5.05	15	3.0	221	8.4	37960	7.9	78	5.4	76635	5.0	31225	4.4
	5.07	24	4.7	•	•	2690	9.0	66	6.8	61860	4.1	25940	3.7
	5.08	94	18.6	1536	58.5	148085	30.8	397	27.4	353481	23.2	182206	25.8
	5.09	19	3.8	20	0.8	10160	2.1	37	2.6	25334	1.7	20298	2.9
	5.11	4	0.8	·		6400	1.3	18	1.2	11766	8*0	7704	1.1
	5.12	2	0.4	13	0.5	2500	0.5	2	0.3	4400	0.3	3203	0.5
	5.13	10	2.0	•		6700	1.4	26	1.8	37820	2.5	19935	2.8
	5.14	16	3.2	06	3.4	27950	5.8	72	5.0	52500	3.5	41411	5.9
	5.15	49	9.7	11	0.4	29549	6.1	157	10.8	110091	7.2	76285	10.8
	5.17	17	3.4	43	1.6	0069	1.4	63	4.3	15960	1.0	11898	1.7
	5.18	П	0.2	-	•	200	0.0	2	0.1	268	0.0	453	0.1
	5.19	10	2.0	-	-	7740	1.6	23	1.6	24787	1.6	15405	2.2
	5.2	5	1.0	2	0.1	285	0.1	12	0.8	11475	0.8	5635	0.8
	9	13	2.6	42	1.6	2475	0.5	39	2.7	37625	2.5	24225	3.4
	8	4	0.8	-	-	650	0.1	5	0.3	2985	0.2	2525	0.4
	10	67	13.2	-	-	13758	2.9	92	6.3	55525	3.7	41030	5.8
ALL		905	506 100.0	2624	2624 100.0	481037 100.0	100.00	1449	100.0	1449 100.0 1520752	100.0	705275	100.0

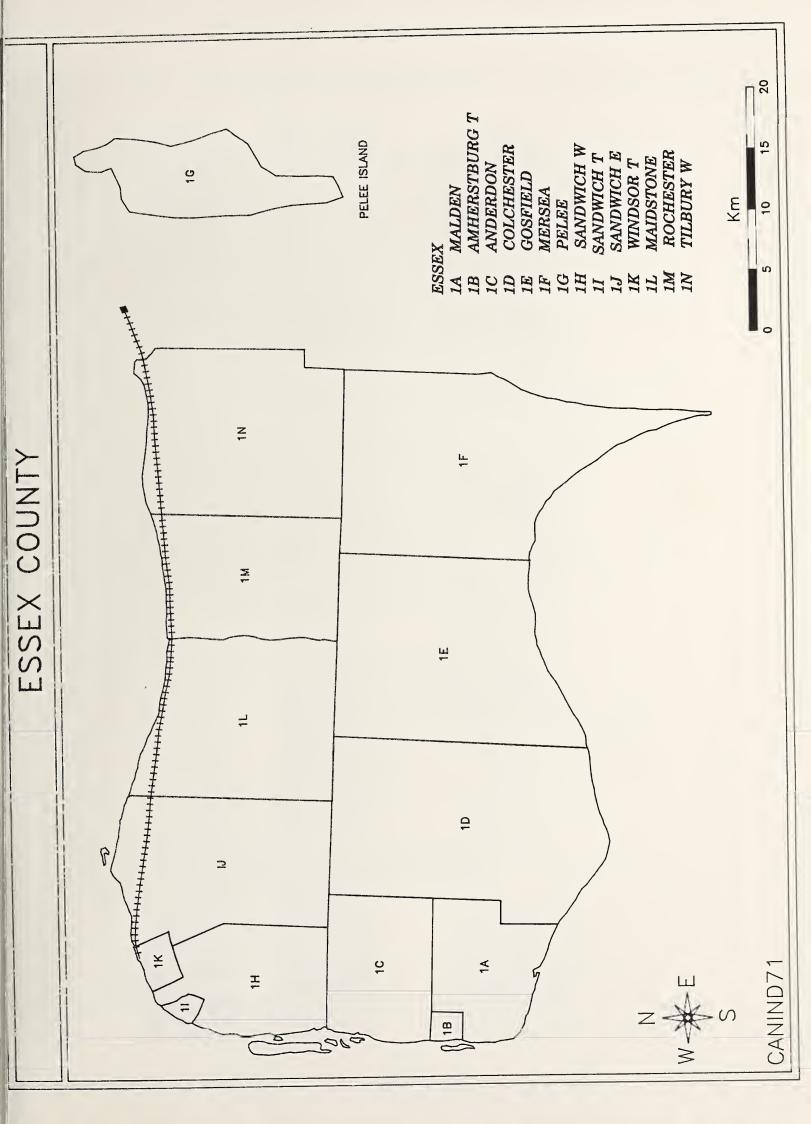
An area of interaction among native Indians, French Canadians and Americans in the eighteenth and early nineteenth centuries, Essex County was still economically under-developed in 1871. Its mean rural population density in 1871 was only 36 persons per square mile (compared with densities over 60 p.s.m. in York and Wentworth Counties) and would not peak until 1911. Its economic landscape presented few signs of the very substantial industrialization that would occur in the late nineteenth and early twentieth centuries. The Great Western Railway skirted the northern edge of the county, connecting Windsor with London to the east.

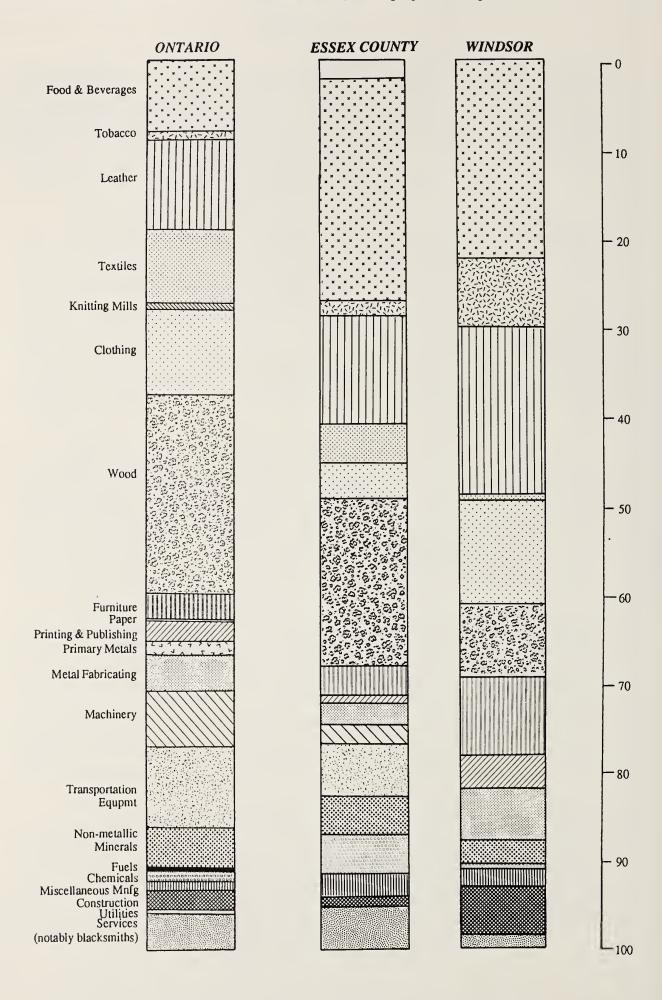
The county's mean value of industrial production per capita (\$69.53) was a little lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 3.3 in Essex compared with 4.4 in the whole province, and the mean value of output per establishment was a little higher -- \$6145, compared with \$5,516. However, these and other measures of industrial output and scale of operations are distorted by the presence of one highly exceptional enterprise. Hiram Walker's distillery in East Sandwich Township employed 106 men in the production of well over \$1.1 million worth of spirits. It easily ranked among Canada's industrial leaders, the top one per cent of enterprises in terms of number employed, gross value of output, value of fixed capital investment, and value added by manufacturing. Indeed, the distillery ranked second in all of Ontario by value of output, and fourth in all of Canada.

Compared with other Ontario regions, the county's urban centres were unremarkable for their industry. Of its total population of 32,697, 22.5 per cent lived in the incorporated towns of Windsor (population 4,253), Amherstburg (1,936) or Sandwich (1,160). The largest of about thirty unincorporated villages were Kingsville with about 800 people and Leamington with about 700. But these small centres were quite unremarkable for their industrial activity. In an analysis of all Ontario urban centres, those in Essex County were found to rank well below the Ontario mean for level of industrialization and to lack any industrial specialization or leading enterprise.

When the industrial structure of Essex is compared with that of Ontario as a whole, we find that several sectors were distinctively strong in the county. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). The unshaded portion at the top of the Essex bar refers to mineral (salt) extraction. Essex County was clearly most remarkable for the strength of its food and beverage sector; chemicals were also over-represented, while textiles, clothing and all the metal and machinery trades were relatively weak. The diagram also illustrates the industrial structure of Windsor separately, showing the relative strength of food and beverages, tobacco, leather goods, furniture and construction, all sectors which employed at least 1.5 times their shares in all of Ontario.

Most establishments in Essex County were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Eighty-seven per cent of its workplaces in the county had five or fewer workers, and only Hiram Walker's distillery reported more than 20 workers. Very few women or girls were employed in the industrial workplaces of Essex County. Essex County was also remarkable for its lack of water-powered industrial activity, over 80 per cent of its output being supported by steam engines, compared with a mean of 36 per cent across Ontario.





		OBSERV	۸.	FORCE	P	FIXCAP	a ₁	TOTEMP	ę.	SUMPROC	၁၀	VADD	
		SUM	PERC-	SUM	PERC- ENT	SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC	 		 	1								
ESSEX	4	H	0.3	p-4	0.1	2000	1.3	10	0.8	2625	0.1	٠	•
	5.01	59	15.9	569	38.8	163264	43.3	309	25.5	1625498	71.5	972078	72.9
	5.02	2	0.5	19		7200	6.1	21	1.7	25791	F .	10665	0.8
	5.04	54	14.6	28	1.9	26980	7.1	149	12.3	92281	4.1	46957	3.5
	5.05	17	4.6	88	6.1	26680	7.1	52	4.3	83180	3.7	46056	3.5
	5.07	15	4.1			3775	7.0	51	4.2	39359	1.7	14164	1.1
	5.08	20	13.5	664	45.2	75691	20.1	231	19.1	193017	8.5	105640	7.9
	5.09	13	4.1	20	1.4	5665	1.5	36	3.0	25991	1.1	20073	1.5
	5.11	2	0.5		•	2000	0.5	13	1.1	5500	0.2	4700	0.4
	5.13	12	3.2	9	0.4	2700	0.7	29	2.4	20770	0.9	14384	1.1
	5.14	9	1.6	44	3.0	9760	2.6	25	2.1	14580	0.6	9015	0.7
	5.15	25	8.9	12	0.8	23940	6.3	72	5.9	48503	2.1	36633	2.7
	5.17	17	4.6	18	1.2	2330	9.0	54	4.5	16212	0.7	8012	0.6
	5.19	34	9.2			14060	3.7	50	4.1	27762	1.2	12102	0.9
	5.2	13	3.5		0.1	3079	0.8	34	2.8	22010	1.0	10745	0.8
	9	2	0.5	•	• 	٠	-	14	1.2	8100	0.4	3400	0.3
	10	46	12.4	•	•	5259	1.4	61	5.0	22425	1.0	18113	1.4
ALL		370	370 100.0	1468	1468 100.0	377383	100.00	1211	100.0	1211 100.0 2273604 100.0 1332737	100.0	1332737	100.0

COUNTY-ESSEX ----

FRONTENAC COUNTY

Frontenac County was less industrialized than most other parts of the province, the mean value of industrial production per capita (\$51.83) being well under the mean for Ontario (\$74.00). The county's economic landscape combined several zones of development from Kingston, the fortress port located strategically at the outlet of Lake Ontario into the St Lawrence River, to the Precambrian Shield that constrained farm settlement for about 80 per cent of the county area.

Kingston and Portsmouth (with the Penitentiary) accounted for more than three of every four of the county's industrial workers and almost 75 per cent its gross value of industrial production. Of Kingston's total population of 12,407 in 1871, 1,330 or just over one in ten was employed in industrial mills, factories or workshops. Higher proportions were recorded in the smaller incorporated villages: nearly one in three of the population in Portsmouth and the Penitentiary, and one in four in Garden Island.

The industrial structures of Frontenac, Kingston and Ontario as a whole, based on employment in major industry groups, are represented in the diagram overpage (the unshaded proportion at the top of Frontenac's bar refers to forestry extraction and services including raft building). Frontenac's lack of a strong farm-based economy is reflected in the weakness of grain and textile mills but two distinctive enterprises or institutions left their mark on the county's industrial structure. One was the rafting, lumbering and ship-building empire of D.D. Calvin based at Garden Island, the entrepot between the Great Lakes and St Lawrence navigation systems. The Kingston Penitentiary, located just west of the city, included a stone masonry yard, the Provincial Hardware Manufacturing Company which made locks and hinges, a cabinet manufactory, and carpentry, paint, blacksmith, harness, tailor, and shoe repair shops. Female prisoners were occupied in knitting socks, mittens and underwear and in sewing shirts and other prisoners' clothing.

Kingston's industrial employment structure is notable for the strength of its clothing, printing and publishing, and metal-fabricating sectors, but especially for its transportation equipment and chemical industries. One enterprise, the Canadian Engine and Machinery Company was by far the largest in the whole county, ranking with Calvin's Garden Island operation among the top one per cent of Canadian industrial businesses in 1871. The other two Kingston firms that employed at least 50 workers were William Power's shipyard and Rowland and Hofler's piano factory. In combining below-average industrial status with a diversified structure not dominated by any particular sector or enterprise, Kingston most resembled Belleville, Stratford, Cobourg and Lindsay among the middle-sized towns and cities of Ontario.

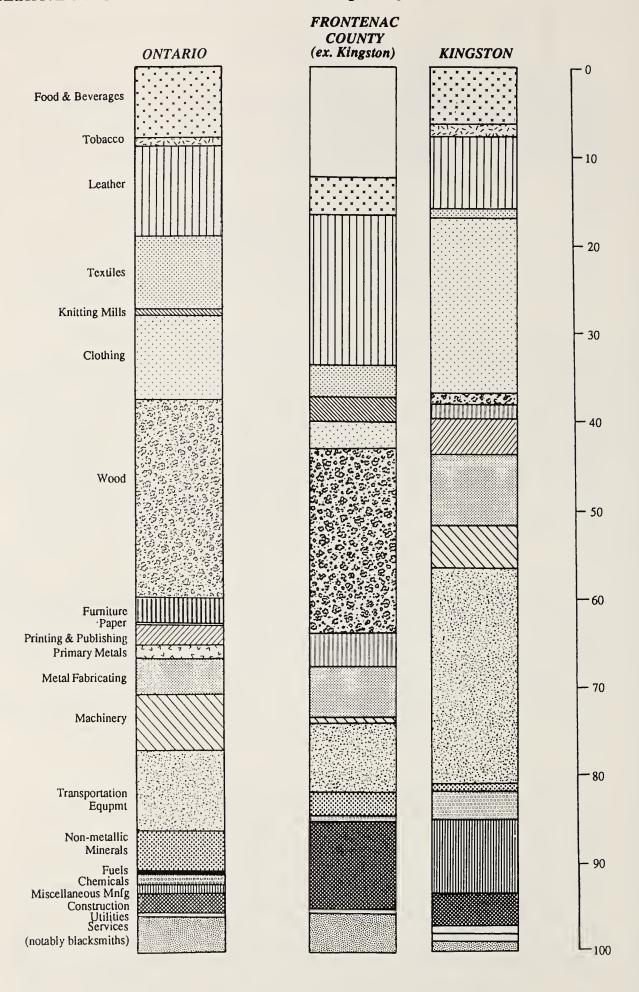
Waterwheels accounted for 70 per cent of the total inanimate power capacity in the rural townships, but in Kingston and the smaller urban centres steam engines provided all the inanimate power. But, one indicator of the under-developed character of industry, only 11 per cent of Kingston industrial employees were counted in large powered factories compared with 47 per cent in Hamilton, 45 per cent in Montreal and 43 per cent in Toronto. As elsewhere in this period, women and girls in paid industrial jobs were clearly concentrated in cities and towns. Seven of every ten women and girls recorded as industrial workers in Frontenac County were in Kingston, compared with only 43 per cent of the men and boys. But the female share of the industrial workforce (under 12 per cent) was much lower than in some other counties and cities such as Montreal (34 per cent), Quebec City (27 per cent) or Toronto (24 per cent). Lower female participation seems to have been typical of centres of metal-working and engineering which offered good wages for men and boys around 1870.

FRONTENAC COUNTY WITH KINGSTON

64H HINCHINBROOKE 64J LOUGHBOROUGH 65C GARDEN ISLAND 65D WOLFE ISLAND 64N PALMERSTON ... 65E PITTSBURGH/... 65F STORRINGTON 640 CLARENDON/... 65A KINGSTON TP 65B PORTSMOUTH 64G KENNEBEC 64F BARRIE TP 64I PORTLAND 64K BEDFORD FRONTENAC 64M OLDEN VIPEN 64L OSO **65E** 65F 64K 640 65A 64L 641 64H 64M 64N ST LAWRENCE FRONTENAC KINGSTON WARDS CATARAQUI SYDENHAM VICTORIA ONTARIO RIDEAU 646 640 64F 99966A 66B 299 Q99**66E**

10 15 20 X E S 0

CANIND71



		OBSERV		FORCE	<u> </u>	FIXCAP	Α,	TOTEMP		SUMPROC	300	VADD	
		SUM	PERC-	SUM	PERC-	SUM	PERC-	SUM	PERC-	SUM	PERC- ENT	SUM	PERC-
COUNTY	SEC												
FRONTENAC	2	п	0.2	•	•	32000	3.0	156	5.8	150000	5.8	127600	11.1
	5.01	49	12.0	349	15.3	124630	11.7	128	4.7	389742	15.0	104769	9.1
	5.02	2	0.5	-	-	800	0.1	18	0.7	18000	0.7	0006	0.8
	5.04	54	13.2	121	5.3	122675	11.5	344	12.7	440052	17.0	124703	10.8
	5.05	24	5.9	192	3.3	26667	2.5	99	2.4	47444	1.8	16499	1.4
	5.06	1	0.2	·	 -	•	-	45	1.7	3400	0.1	2080	0.2
	5.07	42	10.2	-	-	10975	1.0	304	11.2	243140	9.4	85900	7.5
	5.08	102	17.1	1436	63.1	112085	10.5	316	11.6	186548	7.2	96454	8.4
	5.09	8	2.0	34	1.5	16410	1.5	70	2.6	43605	1.7	22068	1.9
	5.11	2	1.2		-	17500	1.6	53	2.0	27600	1.1	19300	1.7
	5.13	14	3.4	47	2.1	42550	4.0	185	6.8	137050	5.3	82940	7.2
	5.14	8	2.0	37	1.6	21625	2.0	70	2.6	54195	2.1	39255	3.4
	5.15	43	10.5	09	2.6	269380	25.3	440	16.2	461282	17.8	208353	18.1
	5.17	10	2.4	10	0.4	9035	0.8	47	1.7	18315	0.7	13717	1.2
	5.19	14	3.4	22	1.0	22300	2.1	49	1.8	104310	4.0	31960	2.8
	5.2	8	2.0	10	0.4	10200	1.0	111	4.1	107850	4.2	40960	3.6
	9	10	2.4	36	1.6	10451	1.0	203	7.5	69266	2.7	53633	4.7
	7	2	0.5	12	0.5	205000	19.3	15	9.0	28713	1.1	20463	1.8
	8	4	1.0	-	•	2000	0.2	80	0.3	4725	0.2	4515	0.4
	10	41	10.0	26	1.1	7295	0.7	85	3.1	56510	2.2	46474	4.0
ALL		410	410 100.0	2276	100.01	2276 100.0 1063578 100.0	100.01	2713	100.0	2591747	100.0	2713 100.0 2591747 100.0 1150643 100.0	100.0

- COUNTY-FRONTENAC --

GREY COUNTY

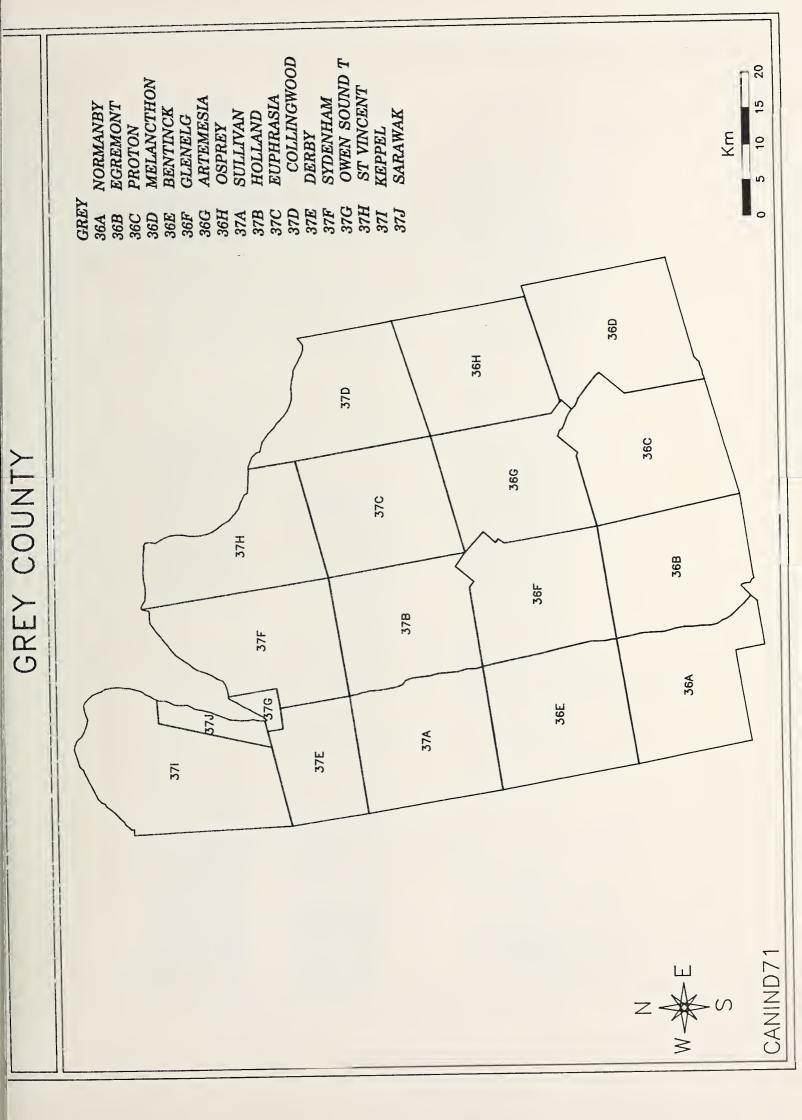
With many of its townships still undergoing settlement, Grey County was part of Ontario's pioneer fringe in 1871 and reached its maximum rural population in 1881. The county's average rural population density of under 32 persons per square mile was little over half the density of the most densely settled townships of southern Ontario. Like only four other counties in southern Ontario, Grey County had no railways at all by 1871. But the county had above-average water-power resources. Almost half its industrial production was powered by waterwheels, compared with under 30 per cent in Ontario generally.

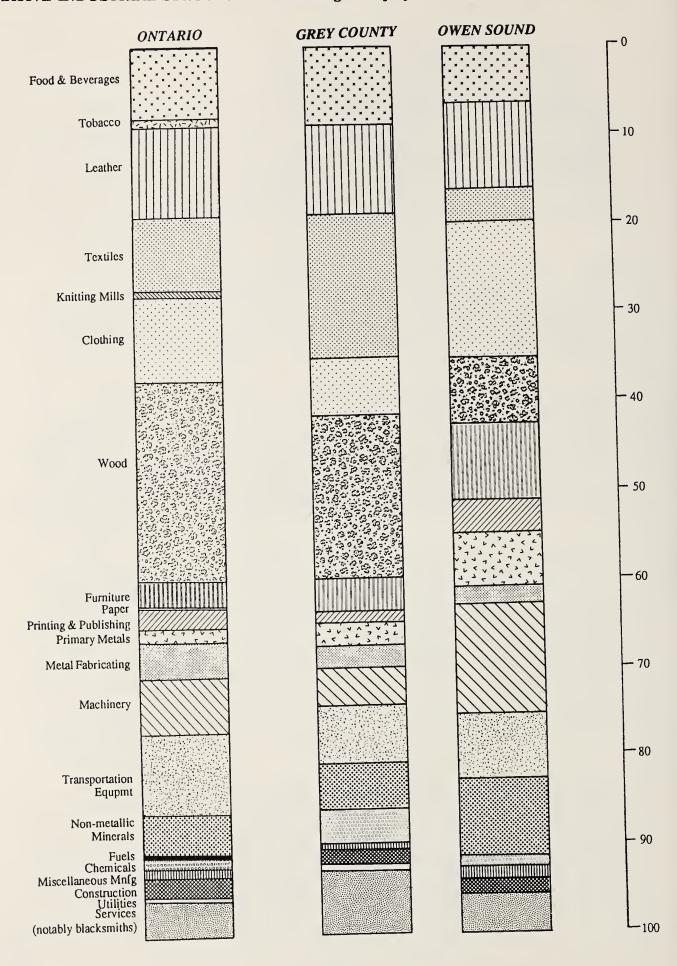
Grey County was less industrialized than other parts of the province. The mean value of industrial production per capita (\$29.74) was significantly lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 2.1 in Grey compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also significantly lower -- \$2,203. compared with \$5,516.

The county was very rural in its settlement and economy: only one in five of its total population of 57,352 lived in the county town and only incorporated urban centre of Owen Sound (population 3,369). But this town was unremarkable for its industrial functions; a comparative analysis of all Ontario urban centres found Owen Sound to rank below the Ontario mean for level of industrialization and to lack any industrial specialization or leading enterprise. Larger unincorporated villages that would later have industrial significance were Durham (about 1,250 people), Meaford (about 1,200) and Hanover (about 700).

When Grey County's industrial structure is compared with that of all Ontario, the mix of industry types is found to be characteristic of rural areas. The diagram overpage has been designed to show these as clearly as possible, using major industry groups (SECs in the database). Wood processing, the largest industrial sector in Grey as in Ontario generally, was located outside urban areas and often on the margins of settlement. However, this sector's share was smaller in Grey than in the province generally. Textile production, in which Grey County had nearly twice the Ontario mean proportion, was usually located in rural areas and small villages. The smaller sectors of furniture, chemicals and blacksmiths, employed more than 1.5 times their shares in whole province. Owen Sound's industrial structure shows strength in the sectors of clothing, furniture, printing and publishing, primary metals, machinery and non-metallic minerals.

Most of Grey County's industrial establishments were very small craftshops - blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Ninety-six per cent of all workplaces in the county had five or fewer workers, a higher proportion than in Ontario generally, and no workplaces had more than 22 employees. Women and girls made up a smaller share of the industrial workforce than in more urban counties (under 12 per cent compared with the Ontario mean of over 14 per cent). More than half the female industrial workers recorded in 1871 in Grey County were handloom weavers.





		OBSERV	- i	FORCE	Fi -	FIXCAP	ار م	TOTEMP	Q.	SUMPROC	<u> </u>	VADD	
		SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC-	NOS	PERC
COUNTY	SEC												
GREY	5.01	56	7.2	1096	36.6	180650	30.4	128	7.9	753977	44.2	136967	20.7
	5.04	96	12.4	98	2.9	42427	7.1	165	10.1	133364	7.8	72490	10.9
	5.05	146	18.9	185	6.2	65336	11.0	264	16.2	151146	8.9	51899	7.8
	5.07	36	4.7		-	15002	2.5	104	6.4	81947	4.8	28399	4.3
	5.08	148	19.1	1445	48.2	133301	22.4	307	18.9	203838	12.0	122238	18.4
	5.09	20	2.6	73	2.4	12636	2.1	28	3.6	28655	1.7	23098	3.5
	5.11	2	0.6	-	-	6300	1:1	19	1.2	10700	0.6	7670	1.2
	5.12	2	0.3	30	1.0	17000	2.9	42	2.6	47000	2.8	26500	4.0
	5.13	22	2.8	18	9.0	19075	3.2	43	2.6	29736	1.7	19438	2.9
	5.14	19	2.5	38	1.3	40255	6.8	71	4.4	66857	3.9	49188	7.4
	5.15	45	5.8	4	0.1	22580	3.8	101	6.2	59149	3.5	41031	6.2
	5.17	38	4.9	80	0.3	3985	0.7	90	5.5	19738	1.2	13158	2.0
	5.19	41	5.3	•	•	6687	1.1	64	3.9	30865	1.8	13907	2.1
	5.2	8	0.4	•	•	2350	0.4	5	0.3	4200	0.2	2620	0.4
	9	12	1.6	12	0.4	5655	1.0	35	2.1	20090	1.2	12370	1.9
	8	4	0.5	•	•	1610	0.3	9	0.4	1600	0.1	1347	0.2
	10	81	10.5	-	•	19980	3.4	126	7.7	62560	3.7	40340	6.1
ALL		774	100.001	2995	100.001	594829	100.00	1628	100.0	1705422	100.00	662660	100.0

HALDIMAND COUNTY

First settled in the early years of the nineteenth century, and with rural population densities in the middle range for Ontario, Haldimand County was traversed from northwest to southeast by the Brantford, Buffalo and Goderich Railway by 1855. But the county was under-developed industrially in relation to other parts of the province in 1871. The mean value of industrial production per capita (\$43.61) was significantly lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 2.7 in Haldimand compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also significantly lower -- \$3,530. compared with \$5,516.

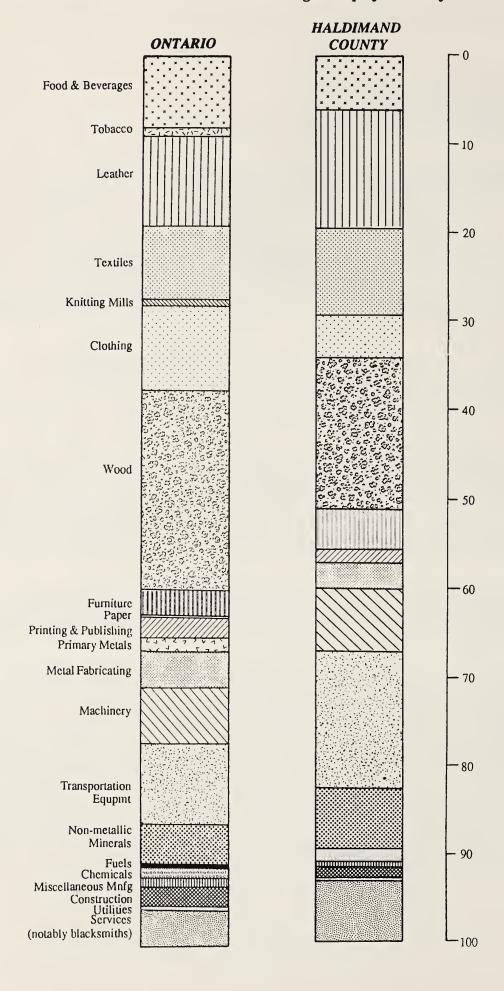
Of the total county population of 24,851, only 14 per cent lived in the villages of Dunnville (1,452 population), Caledonia (1,246), and Cayuga (803). Though only Caledonia had above-average industrial activity, these small centres did account for nearly two-fifths of the county's industrial output.

When Haldimand County's industrial structure is compared with that of all Ontario, one finds a mix that is fairly typical of rural areas. The diagram overpage has been designed to show these as clearly as possible, using major industry groups (SECs in the database). But wood and food processing were smaller sectors in Haldimand than generally in Ontario, while leather, textiles, furniture, and especially transportation equipment, non-metallic minerals and blacksmiths were stronger.

Water power was relatively much more important in Haldimand than in some other regions, waterwheels supporting 51 per cent of the value of output compared with a mean of 29 per cent across Ontario. Steam power was correspondingly weak.

Most of Haldimand County's industrial establishments were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. More than nine in ten workplaces had five or fewer workers, a higher proportion than in Ontario generally. Only two establishments, both in Caledonia, had more than 25 employees -- Ronald McKinnon's woollen mill which employed 37, and John Scott's foundry and agricultural implement works which employed 32. Another exceptional enterprise was McQuarrie and Thorburn's large grist mill in Oneida Township which with only five employees reported \$266,500 worth of output. Very few women and girls worked in the county's mills and shops; they formed under 8 per cent of the industrial workforce compared with the Ontario average of over 14 per cent.

MOULTON/... DUNNVILLE V CANBOROUGH WALPOLE RAINHAM CAYUGA S CAYUGA V CAYUGA V ONEIDA SENECA CALEDONIA V HALDIMAND DUNN X B 18A 9 17E 17F 17G 17G 17 18C HALDIMAND COUNTY 17C 17D 176 17E 178 17F 17A CANIND71



		OBSERV	I A	FORCE	<u> </u>	FIXCAP	<u>-</u> -	TOTEMP	<u>.</u>	SUMPROC	၁၀	VADD	
		SUM	PERC- ENT	NOS	PERC- ENT	SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC												
HALDIMAND	5.01	21	6.8	069	46.8	92300	33.6	48	5.7	545052	50.3	48462	13.9
	5.04	57	18.6	12	0.8	21630	7.9	114	13.5	76480	7.1	38018	10.9
	5.05	23	7.5	95	6.4	35735	13.0	84	6.6	68404	6.3	29456	8.4
	5.07	10	3.3	•	•	4092	1.5	40	4.7	28000	2.6	10250	2.9
	5.08	40	13.0	488	33.1	40125	14.6	145	17.1	134440	12.4	55798	16.0
	5.09	7	2.3	34	2.3	12850	4.7	41	4.8	33730	3.1	26950	7.7
	5.11	8	1.0	•	-	6000	2.2	11	1.3	7000	9.0	4860	1.4
	5.13	10	3.3	16	1.1	3415	1.2	24	2.8	11180	1.0	7195	2.1
	5.14	14	4.6	34	2.3	11175	4.1	59	7.0	34950	3.2	26120	7.5
	5.15	48	15.6	62	4.2	29990	10.9	133	15.7	83720	7.7	60116	17.2
	5.17	20	6.5	43	2.9	8518	3.1	62	7.3	21681	2.0	15675	4.5
	5.19	8	1.0	•	·	260	0.1	10	1.2	2385	0.2	1489	0.4
	5.2	2	0.7	•	-	220	0.1	4	0.5	1150	0.1	850	0.2
	9	4	1.3	•	·	375	0.1	10	1.2	6350	9.0	3425	1.0
	8	2	0.7	٠	-	190	0.1	2	0.2	830	0.1	718	0.2
	10	43	14.0	•	-	7766	2.8	59	7.0	28300	2.6	19865	5.7
ALL		307	307 100.0	1474	1474 100.0	274641 100.0	100.001	846	100.0	846 100.0 1083652 100.0	100.0	349247 100.0	100.0

HALTON COUNTY

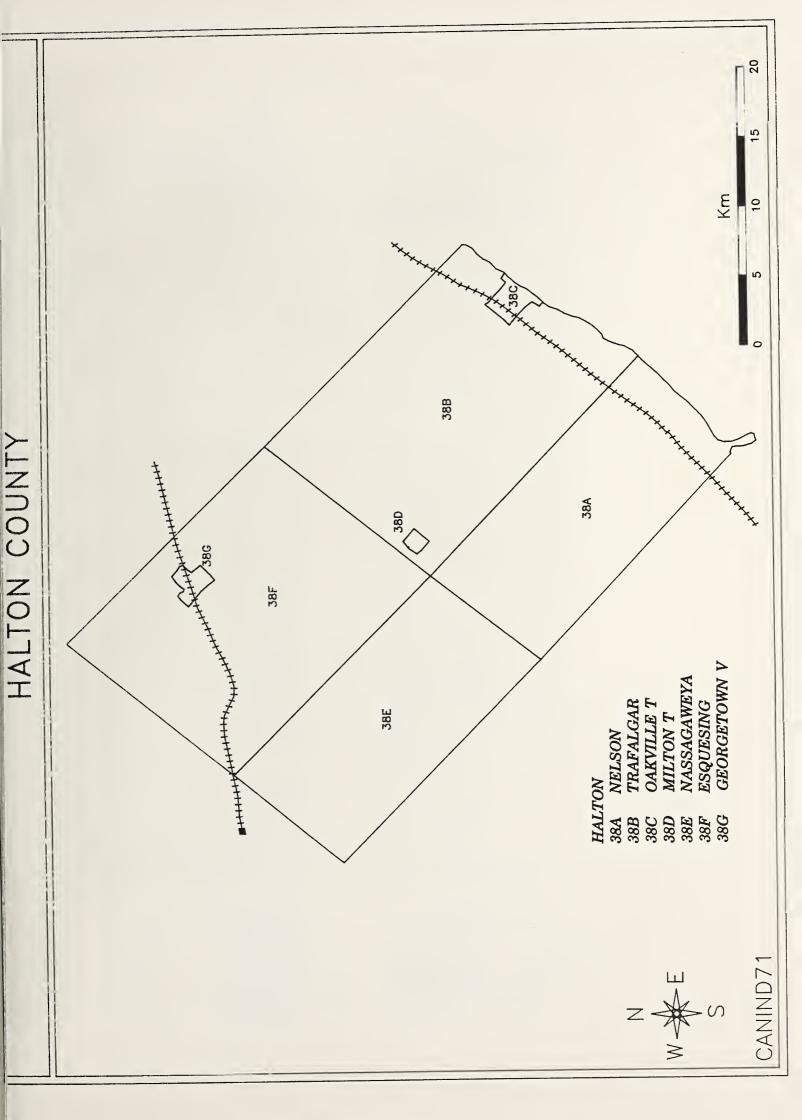
Halton County formed part of the maturely developed zone of the province by 1871, with above-average rural population densities. Its small territory combined well-established farms, several towns and villages, two major east-west railway lines, and large stands of millable woods. In its level of urban-industrial activity, Halton was broadly similar to most of southern Ontario. The mean value of industrial production per capita (\$86) was above the Ontario mean of \$74. The scale of industrial activity was generally similar, with an average 4.4 employees per industrial establishment, and a mean value of output of \$5,077. in Halton compared with an Ontario mean of \$5,516.

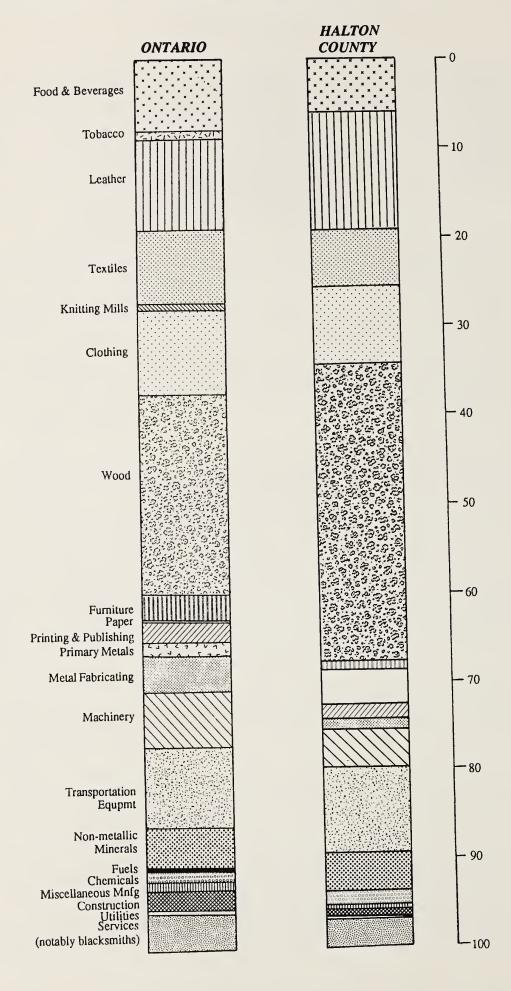
When Halton County's industrial structure is compared with that of Ontario as a whole, we find a mix of industry types that is fairly characteristic of rural areas but with several sectors distinctively stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). Wood processing, the largest industrial sector in Halton as in Ontario generally, was located outside urban areas and often on the margins of settlement. This sector was substantially larger in Halton than in the province generally. Paper making, a very small sector in all of Ontario, was distinctively strong in Halton (represented by the unshaded section at the 70 per cent level on the county bar).

Seventeen per cent of the county's 22,606 people were counted in the three incorporated urban centres of Oakville (1,684), Georgetown (1,282) and Milton, the county town (891). Industrial establishments in these three places together produced over one third of the value of industrial output in the county. The next largest unincorporated villages were Acton (about 700 people) and Wellington Square (700) which would join with Port Nelson (200) in 1873 to form Burlington. When compared with other urban centres in Ontario, only Georgetown can be characterized as industrialized with over 22 per cent of its population employed in industry and at least two factories. In combining a high measure of industrial employment with a specialized structure, Georgetown most resembled Oshawa, Dundas, Gananoque and Ingersoll and also the somewhat larger centres of Brantford, Guelph and Brockville.

Quite high levels of industrial use of water and steam power were recorded in the county. Waterwheels, installed at various sites along the Niagara Escarpment, powered 45 per cent of industrial output, compared with an Ontario mean of 29 per cent.

Most of Halton County's industrial units were small craftshops—blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Nearly four of every five establishments reported five or fewer employees, though this proportion was somewhat smaller than in Ontario generally. Only one large factory was recorded in 1871 -- John Dayfoot's tannery and footwear business in Georgetown which had 70 employees. Smaller factories were James Barber's paper factory in Georgetown (46 workers), Smith and Thompson's foundry and machine shop in Oakville (40 employed), Edward Bescoby's lime kiln in Esquesing Township and the Thompson Smith Co. sawmill in Nassagaweya Township.





		OBSERV	A	FORCE	[24]	FIXCAP	9	TOTEMP	e,	SUMPROC	၁၀	VADD	
		SUM	PERC- ENT	SUM	PERC-	SUM	PERC-	SUM	PERC- ENT	SUM	PERC-	SUM	PERC- ENT
COUNTY	SEC						1						
HALTON	5.01	31	8.1	407	16.1	116775	17.1	82	4.9	603002	31.0	107971	13.0
	5.04	23	13.8	106	3.6	78560	11.5	222	13.3	229626	11.8	107405	12.9
	5.05	31	8.1	184	7.3	48137	7.0	114	6.8	102870	5.3	46676	5.6
	5.07	38	6.6			17800	2.6	148	8	122336	6.3	59916	7.2
	5.08	83	21.7	1414	56.0	189400	27.7	559	33.5	371759	19.1	204702	24.6
	5.09	10	2.6	15	9.0	2600	0.8	19	1.1	17575	0.9	13210	1.6
	5.1	8	0.8	172	6.8	58000	8.5	62	3.7	118000	6.1	35900	4.3
	5.11	ın	1.3	0		12500	1.8	32	1.9	19900	1.0	14875	1.8
	5.13	11	2.9	•	•	11590	1.7	22	1.3	23230	1.2	15055	1.8
	5.14	15	3.9	81	3.2	29866	4.4	75	4.5	56886	2.9	42327	5.1
	5.15	36	9.4	47	1.9	59390	8.7	158	9.4	116414	0.9	76221	9.1
	5.17	13	3.4	П	0.0	13280	1.9	75	4.5	43691	2.2	35749	4.3
	5.19	S	1.3	116	4.6	29350	4.3	24	1.4	73095	3.8	39215	4.7
	5.2	4	1.0	6	•	1850	0.3	11	0.7	6580	0.3	4060	0.5
	9	3	0.8	•	•	006	0.1	.C	0.3	2700	0.1	2170	0.3
	8	1	0.3	•		300	0.0		0.1	400	0.0	287	0.0
	10	41	10.7			11085	1.6	61	3.7	36010	1.9	27680	3.3
ALL		383	383 100.0	2527	100.0	684383 100.0	100.0	1669	100.0	1669 100.0 1944074	100.0	833419	100.0

: 4 -

COUNTY-HALTON

HASTINGS COUNTY

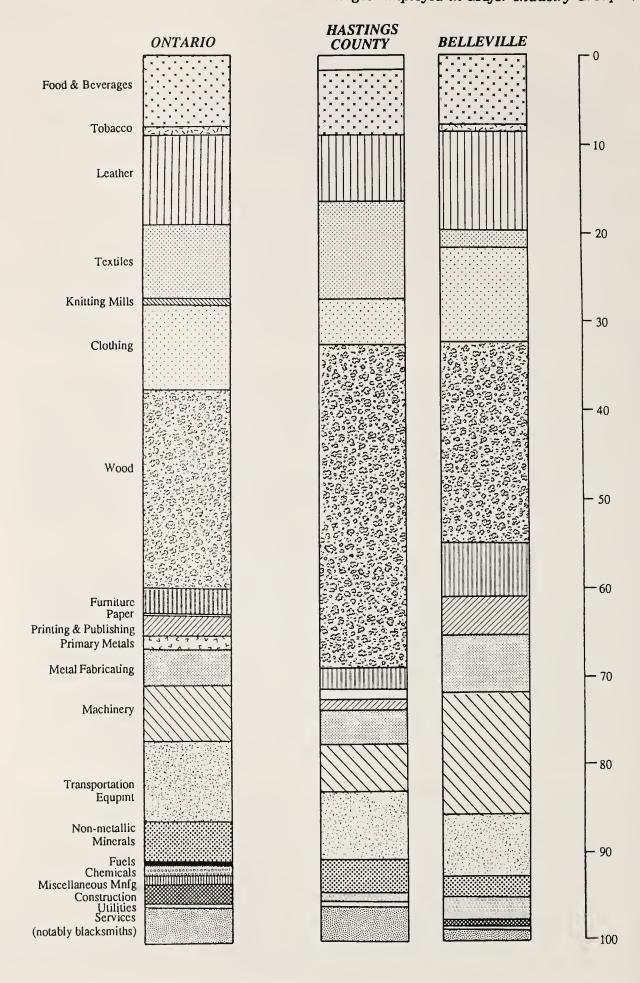
Hastings County was less industrialized than most other parts of the province, the mean value of industrial production per capita (\$62.69) being somewhat under the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 3.8 in Hastings compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also significantly lower -- \$3,976. compared with \$5,516.

The economic landscape combined several zones of development from Belleville and other early settlements around the Bay of Quinte to the Precambrian Shield that constrained farm settlement in the north. The only railway, the Grand Trunk line, ran close to the lakeshore. Much of Hastings County was still part of Ontario's pioneer fringe in 1871, its average rural population density of only 17.5 persons per square mile was only one quarter that of the most closely settled townships of southern Ontario. But Hastings County had above-average water-power resources. Thirty-six per cent of its industrial production was powered by waterwheels, compared with under 30 per cent in Ontario generally.

The county was very rural in its settlement and economy: only one in five of its total population of 48,364 lived in Belleville (7,305) or the smaller incorporated villages of Trenton (1,796) or Stirling (779). Industrial establishments in these three centres accounted for more than two-fifths of the county's total industrial output. As county town and commercial centre, Belleville was unremarkable for its industrial functions; compared with all Ontario urban centres it ranked below the mean for level of industrialization and lacked any industrial specialization or leading enterprise. The largest of the unincorporated villages were Frankford (about 900), Madoc (about 800), Cannifton and Tweed (each about 600).

When Hastings County's industrial structure is compared with that of all Ontario, one finds a mix of industry types that is characteristic of rural areas. The diagram overpage has been designed to show these as clearly as possible, using major industry groups (SECs in the database). The unshaded section at the top of the county bar refers to mineral extraction. Wood processing, with an even larger share in Hastings than in Ontario generally, was located outside urban areas and often on the margins of settlement. There was a small concentration of paper-making. Textile production, in which Hastings County had more than the Ontario mean proportion, was usually located in rural areas and small villages. The diagram also illustrates the industrial structure of Belleville separately, showing the relative strength of furniture, printing and publishing, metal fabricating, machinery and chemicals, all sectors which employed at least 1.5 times their shares in the whole province.

Most of the county's industrial establishments were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Nearly nine in ten workplaces in the county had five or fewer workers, a higher proportion than in Ontario generally. Four large powered factories reported more than 50 workers each and eight smaller establishments between 26 and 50 employees each. Two Hastings sawmilling enterprises ranked among the top one per cent of Canada's industrial leaders in 1871. The Gilmour Company's Trenton sawmill employed 170 men and a 110-horse-power steam engine in producing \$220,000 worth of sawn lumber. H.B. Rathbun and Sons reported 311 men in their sawmill at Mill Point (later renamed Deseronto), where they also operated a shipyard as well as smaller establishments.



		OBSERV	Λ.	FORCE		FIXCAP		TOTEMP	<u>-</u>	SUMPROC	00	VADD	
		SUM	PERC- ENT	SUM	PERC-	SUM	PERC-	SUM	PERC-	SUM	PERC-	SUM	PERC- ENT
COUNTY	SEC						-						
HASTINGS	4	2	0.2	40	6.0	14000	1.5	22	0.7	7720	0.3	5224	0.4
	5.01	70	8.4	1066	25.3	218818	24.1	231	7.3	972953	32.1	249791	18.9
	5.02	1	0.1	•	-	200	0.0	9	0.2	2000	0.1	1200	0.1
	5.04	06	10.8	107	2.5	37449	4.1	244	7.7	185045	6.1	99735	7.6
	5.05	255	30.5	174	4.1	35110	3.9	342	10.8	142937	4.7	47677	3.6
	5.07	44	5.3	•	•	8755	1.0	167	5.3	114780	3.8	55096	4.2
	5.08	128	15.3	2002	49.6	275063	30.3	1168	37.0	864538	28.5	346082	26.2
	5.09	15	1.8	123	2.9	11225	1.2	74	2.3	58610	1.9	41000	3.1
	5.1	3	0.4	145	3.4	15900	1.7	33	1.0	24500	0.8	17100	1.3
	5.11	9	0.7	9	0.1	18250	2.0	46	1.5	30300	1.0	20809	1.6
	5.13	19	2.3	139	3.3	35150	3.9	113	3.6	114474	3.8	69837	5.3
	5.14	16	1.9	171	4.1	104305	11.5	174	5.5	145626	4.8	101568	7.7
	5.15	59	7.1	103	2.4	42825	4.7	237	7.5	172708	5.7	121844	9.2
	5.17	26	3.1	20	1.2	25628	2.8	122	3.9	56458	1.9	45317	3.4
	5.19	8	1.0	•	•	12150	1.3	36	1.1	48950	1.6	28775	2.2
	5.2	1	0.1	٠	•	75	0.0	1	0.0	1440	0.0	1190	0.1
	9	2	0.2	٠	-	200	0.1	9	0.2	5100	0.2	4100	0.3
	7	1	0.1	•	•	35900	4.0	4	0.1	7700	0.3	5900	0.4
	8	2	0.2	•	•	410	0.0	4	0.1	1550	0.1	1470	0.1
	10	87	10.4	9	0.1	17136	1.9	130	4.1	74645	2.5	57078	4.3
ALL		835	100.001	4219	100.00	908849 100.0	100.001	3160	100.0	3032034 100.0	100.0	1320793 100.0	100.

-- COUNTY=HASTINGS ----

HURON COUNTY

Consisting of the western and broader section of the Huron Tract developed for settlement by the Canada Company from the 1830s, Huron County had rural population densities in the middle range for Ontario. Its rural population would peak in 1881. The county was among the earliest parts of Ontario to be traversed by a railway -- the Brantford, Buffalo and Goderich Railway from the mid-1850s (part of the Grand Trunk system by 1871).

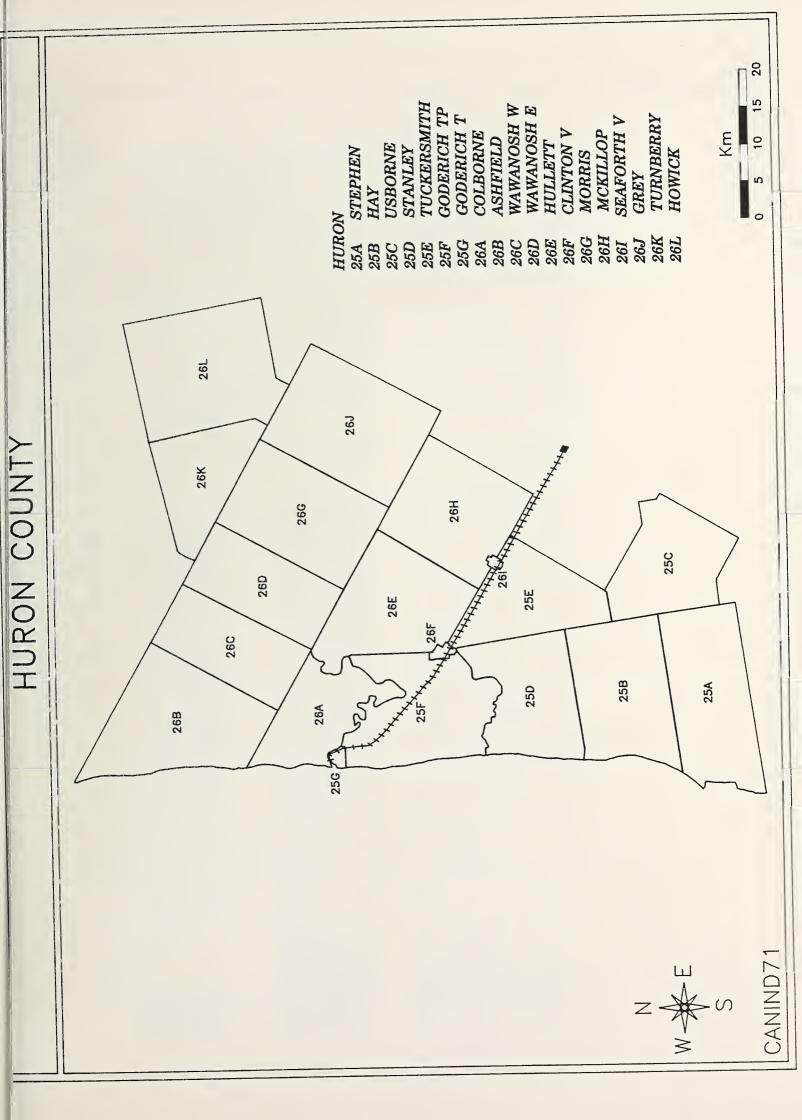
Huron County was somewhat under-developed industrially in relation to other parts of the province in 1871. The mean value of industrial production per capita (\$46.14) was significantly lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 3.1 in Huron compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also lower -- \$4,536. compared with \$5,516.

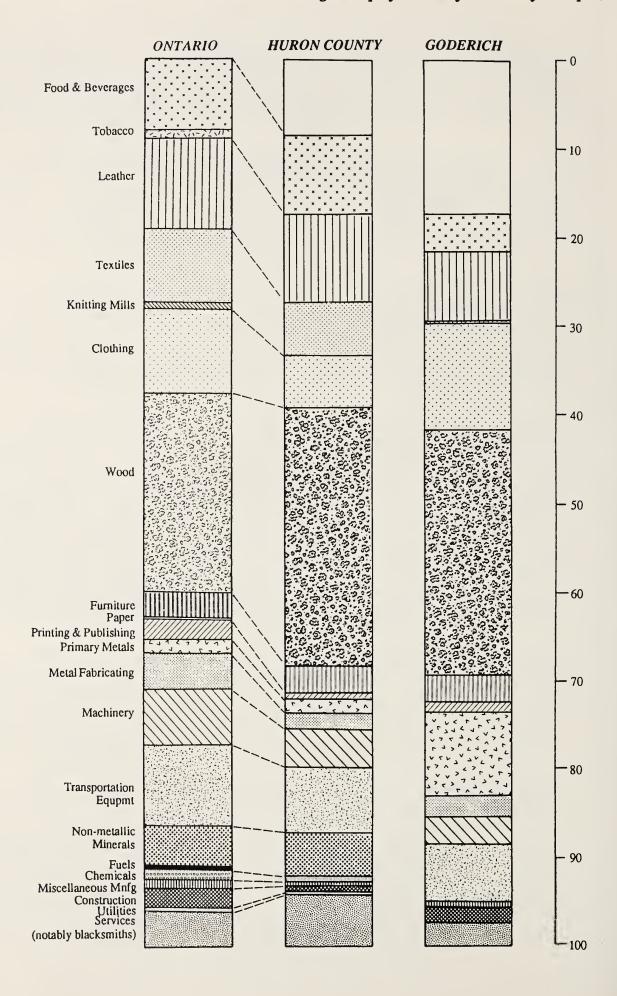
Of the total county population of 66,165, only 11 per cent lived in the county town of Goderich (3,954 population), or the villages of Clinton (2,016) or Seaforth (1,368). But these three urban centres accounted for almost half the county's industrial output. Seaforth was the most highly industrialized with nearly 19 per cent of its population employed in industry, compared with under 10 per cent in Goderich and Clinton. Among the larger unincorporated villages were Ainleyville (later Brussels, about 800), Blyth (700), Exeter (1,000), Wingham (700) and Wroxeter (600).

When Huron County's industrial structure is compared with that of all Ontario, we find that one or two sectors were distinctively stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). The unshaded section at the top of the Huron and Goderich bars refers to mineral extraction, specifically salt. Huron County was most remarkable for the strength of its salt extraction industry, concentrated in Goderich, and the wood processing and blacksmith sectors were relatively stronger in Huron than in the province as a whole. Otherwise the mix of industry types was fairly characteristic of rural Ontario, except that textiles and the metals-machinery sectors were significantly smaller in Huron. The diagram also illustrates the industrial structure of Goderich separately, with the distinctive concentrations of salt extraction and processing and of primary metals.

Both water-power and steam-power were relatively more important in Huron than in some other regions: waterwheels supported 34 per cent of the value of output compared with an Ontario mean of 29 per cent while steam engines supported 42 per cent compared with a provincial mean of 36 per cent. Very few women and girls worked in the county's mills and shops; they formed only 7 per cent of the industrial workforce compared with the Ontario average of over 14 per cent.

Most of Huron County's industrial establishments were very small craftshops - blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Eighty-five per cent of workplaces had five or fewer workers, about the same proportion as in Ontario generally. Only one establishment, the Standly Company's sawmill and stave factory in Goderich, employed more than 50 workers who used a 40-hp steam engine to produce a modest value of output. Only three other businesses, a salt works and a stave factory in Seaforth and a foundry in Goderich, employed between 30 and 40 workers. Three large flour mills in Goderich and Seaforth each employed small numbers of workers to produce at least \$100,000 worth of output.





		OBSERV	>	FORCE	B42	FIXCAP	e _y	TOTEMP	ą	SUMPROC	00	VADD	
		SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- BNT
COUNTY	SEC				-							- recours	
HURON	4	15	2.2	463	10.8	193100	17.1	163	7.7	284540	6,0	243815	23.5
	5.01	63	9.4	1229	28.8	281950	24.9	186	8.8	1487583	48.7	126776	12.2
	5.04	102	15.2	85	2.0	107603	9.5	212	10.0	209318	6.9	96159	9.3
	5.05	50	7.4	289	6.8	44454	3.9	127	6.0	83692	2.7	20608	2.0
	5.07	77	6.5		•	52620	4.6	128	0.9	70675	2.3	27175	2.6
	5.08	133	19.8	2008	47.0	279130	24.7	622	29.4	494161	16.2	260256	25.0
	5.09	19	2.8	58	1.4	29300	2.6	65	3.1	50936	1.7	34291	3.3
	5.11	2	0.3		•	3000	0.3	16	0.8	7000	0.2	4800	0.5
	5.12	2	0.3	27	0.6	13500	1.2	40	1.9	35000	1.1	17750	1.7
	5.13	19	2.8	19	0.4	15650	1.4	35	1.7	26905	0.9	13632	1.3
	5.14	22	3.3	89	1.6	30110	2.7	98	4.1	94802	3.1	52948	5.1
	5.15	62	9.2	10	0.2	41900	3.7	166	7.8	91980	3.0	64827	6.2
	5.17	38	5.6	14	0.3	8246	0.7	105	5.0	26150	0.9	16879	1.6
	5.19	8	1.2	·	•	2000	0.2	11	0.5	6872	0.2	4445	0.4
	5.2	2	0.3	•	•	700	0.1	4	0.2	4730	0.2	2770	0.3
	9	8	1.2	•	•	1100	0.1	23	1.1	10430	0.3	7127	0.7
	8	2	0.3	-	•	200	0.0	2	0.1	555	0.0	•	٠
	10	82	12.2	۰	•	27370	2.4	127	6.0	67755	2.2	45126	4.3
ALL		673	100.001	4270	100.0	1131933	100.001	2118	100.0	3053084	100.0	100.0 3053084 100.0 1039384 100.0	100.0

KENT COUNTY

A little later in its development than other counties along Lake Erie to the east, Kent County had a mean rural population density of only 36 persons per square mile in 1871 (compared with densities over 60 p.s.m. in York and Wentworth Counties). Its rural population would peak in 1891. The Great Western Railway crossed the centre of the county, linking it with London to the northeast and Windsor in the southwest.

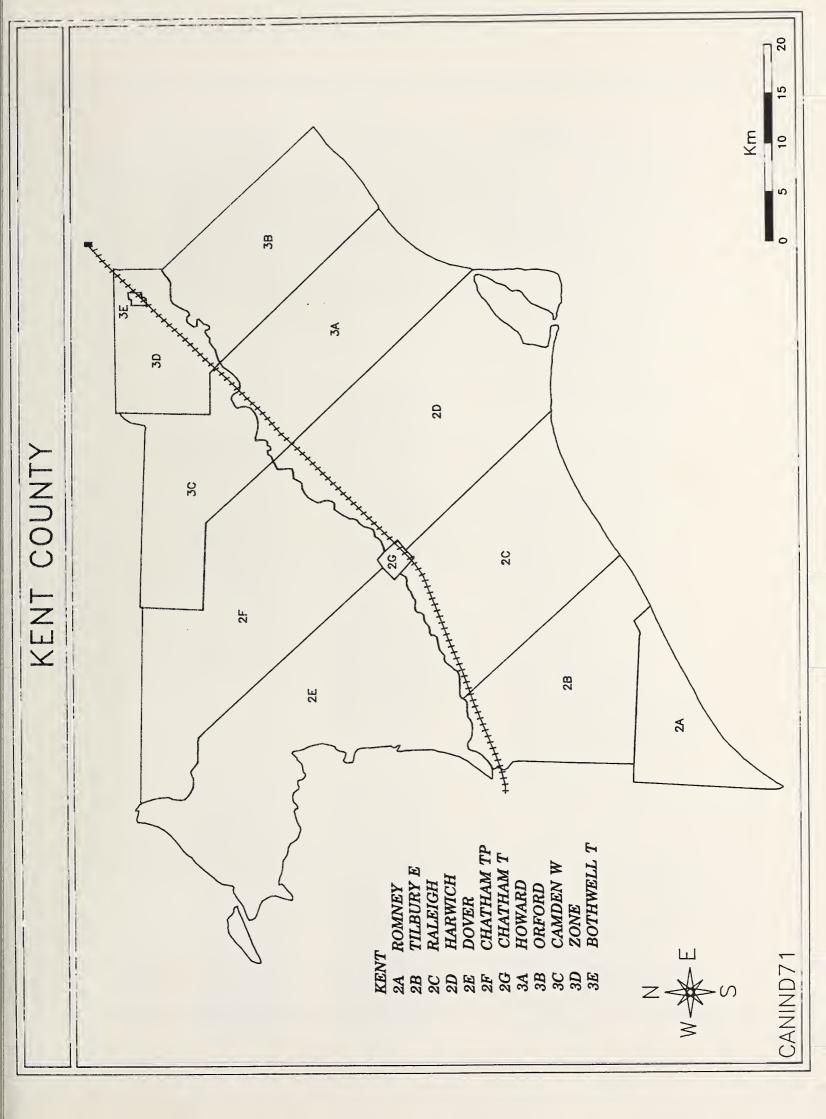
The county's mean value of industrial production per capita (\$48.93) was much lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was 4.1 in Kent compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also somewhat lower -- \$4,570. compared with \$5,516.

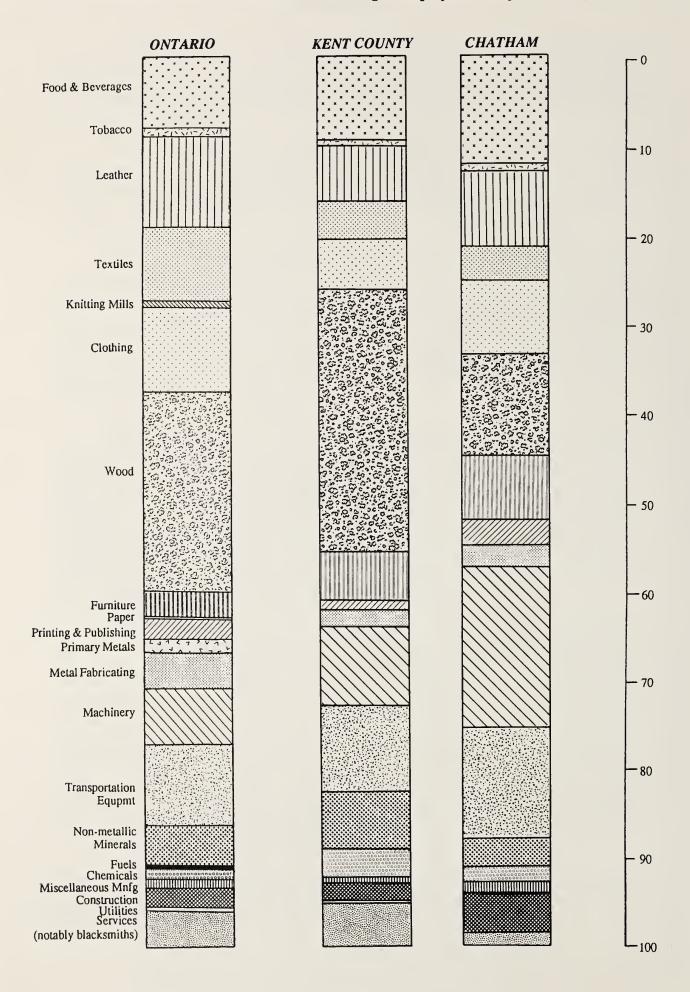
Of the total county population of 40,634, only 17 per cent lived in the county town of Chatham (5,873 population), or the town of Bothwell (995). These two urban centres accounted for over half the county's industrial output though neither was highly industrialized. Under eight per cent of Chatham's population were employed in industry and under 10 per cent of Bothwell's. In an analysis of all Ontario urban centres, those in Kent County were found to rank well below the Ontario mean for level of industrialization and to lack any industrial specialization or leading enterprise. Among the larger unincorporated villages were Dresden (about 1,000 people), Blenheim (850), Morpeth (600) and Wallaceburg (600).

When the industrial structure of Kent is compared with that of the whole province, we find that several sectors were distinctively stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). Kent County was most remarkable for the strength of wood processing, furniture, machinery, non-metallic minerals and chemicals, while leather products, textiles, clothing and metal fabricating were relatively weak. The diagram also illustrates the industrial structure of Chatham separately, showing the relative strength of food and beverages, furniture, machinery, transportation equipment and construction, all sectors which employed at least 1.5 times their shares in all Ontario.

Most establishments in Kent County were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Seventy-eight per cent of its workplaces in the county had five or fewer workers, but this was less than the share of small workplaces in Ontario generally. No businesses employed over 50 workers, but over one in five had workforces in the range of 6 to 25 employees. However, Hyslop and Ronald of Chatham operated a steam engine factory employing 42, a ship building yard employing 40 and an implement factory employing 20, reporting these three enterprises separately. Also in Chatham were William Gray's wagon shop with 33 workers, Robert Smith's cabinet shop with 34, and James Lamont's pork curing establishment with 30. Daniel Van Allan operated a sawmill in Chatham Township with 33 workers, Very few women or girls were employed in the industrial workplaces of Kent County; they formed only 6 per cent of the total workforce.

Like Essex, Kent County was remarkable for its lack of water-powered industrial activity. Over 60 per cent of its output was supported by steam engines, compared with a mean of 36 per cent across Ontario.





		OBSERV	_ ·	FORCE	H	FIXCAP	9	TOTEMP	Ta a	SUMPROC	Soc	VADD	
		SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	NOS	PERC- ENT
COUNTY	SEC					1							
KENT	4	П	0.2	•	•	200	0.1	-	0.1	1500	0.1	•	•
	5.01	38	8.7	416	18.8	108575	18.3	148	8.3	580757	29.2	122048	13.5
	5.02		0.2	•		1500	0.3	9	0.3	4500	0.2	3500	0.4
	5.04	48	11.0	46	2.1	22915	3.9	121	6.8	112493	5.7	67297	7.5
	5.05	6	2.1	82	3.7	55565	9.4	72	4.0	71163	3.6	27183	3.0
	5.07	34	7.8	-		9045	1.5	103	5.8	94624	4.8	41149	4.6
	5.08	80	18.4	1320	59.7	194360	32.8	533	29.9	548719	27.6	251007	27.8
	5.09	19	4.4	47	2.1	20780	3.5	93	5:2	52570	2.6	41781	4.6
	5.11	4	0.9	-	·	15500	2.6	24	1.3	13000	0.7	10300	1.1
	5.12	1	0.2	10	0.5	200	0.0	4	0.2	700	0.0	310	0.0
	5,13	11	2.5	8	0.4	38850	9.9	32	1.8	37640	1.9	20693	2.3
	5.14	15	3.4	200	9.1	51440	8.7	159	8.9	157008	7.9	124468	13.8
	5.15	32	7.4	40	1.8	30010	5.1	174	9.8	103960	5.2	66191	7.3
	5.17	26	0.9	17	0.8	8445	1.4	112	6.3	52495	2.6	42235	4.7
	5.18	2	0.5	14	9.0	4500	0.8	5	0.3	12180	0.6	8204	0.9
	5.19	35	8.0	10	0.4	13786	2.3	55	3.1	51645	2.6	15800	1.8
	5.2	5	1.1	•	•	1445	0.2	13	0.7	11810	9.0	9903	1.1
	9	8	1.8	•	•	1780	0.3	39	2.2	33900	1.7	20668	2.3
	8	2	0.5	•	•	250	0.0	3	0.2	1000	0.1	425	0.0
	10	64	14.7	-	•	12255	2.1	84	4.7	46690	2.3	29590	3.3
ALL		435	100.00	2210	2210 100.0	591701	100.00	1781	100.0	1781 100.0 1988354 100.0	100.0	902752	100.0

With the other counties in the southwest corner of Ontario, Lambton County was still being settled and developed in 1871. Its mean rural population density of only 29 persons per square mile in 1871 was under half the density of counties such as York and Wentworth and would not peak until 1891. The county was crossed by two railway lines as part of their long-distance strategies -- the Grand Trunk Railway to the north and the Great Western though the centre (with a branch to Petrolia). The Canada Southern Railway would cross the southern part of the county a few years later.

Lambton County's mean value of industrial production per capita (\$52.96) was much lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was 2.7 in Lambton compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also somewhat lower -- \$4,703. compared with \$5,516.

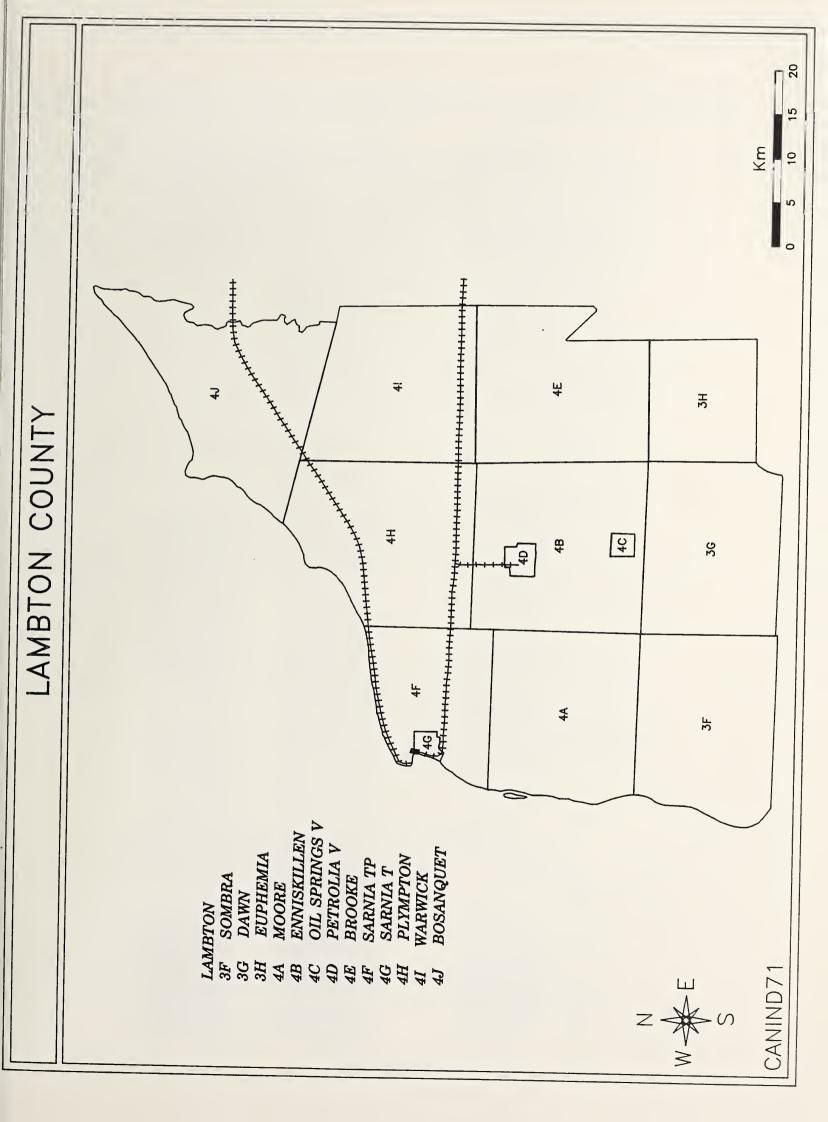
Of the total county population of 38,897, only 5.4 per cent lived in the county town of Sarnia (2,929 population) or the villages of Petrolia (2,651) or Oil Springs (551). These three urban centres (especially the larger two) accounted for 45 per cent of the county's industrial output though none was highly industrialized. Under nine per cent of Sarnia's population were employed in industry and only seven per cent of Petrolia's, both well below the mean for all Ontario urban centres. Petrolia and Oil Springs were undergoing a boom in oil extraction and processing. The only unincorporated village of any size was Sarnia's neighbour, Point Edward, with about 1,000 people.

When we compare the industrial structure of Lambton with that of all Ontario, we find a mix that was generally typical of rural counties but with a distinctive strength in oil. The diagram overpage has been designed to show these as clearly as possible, using major industry groups (SECs in the database). Lambton County was broadly similar to all of Ontario in most of its sectors but stronger in wood processing and most notably in fuels which occupied 8 per cent of the county's industrial workers but accounted for over 35 per cent of its value of output.

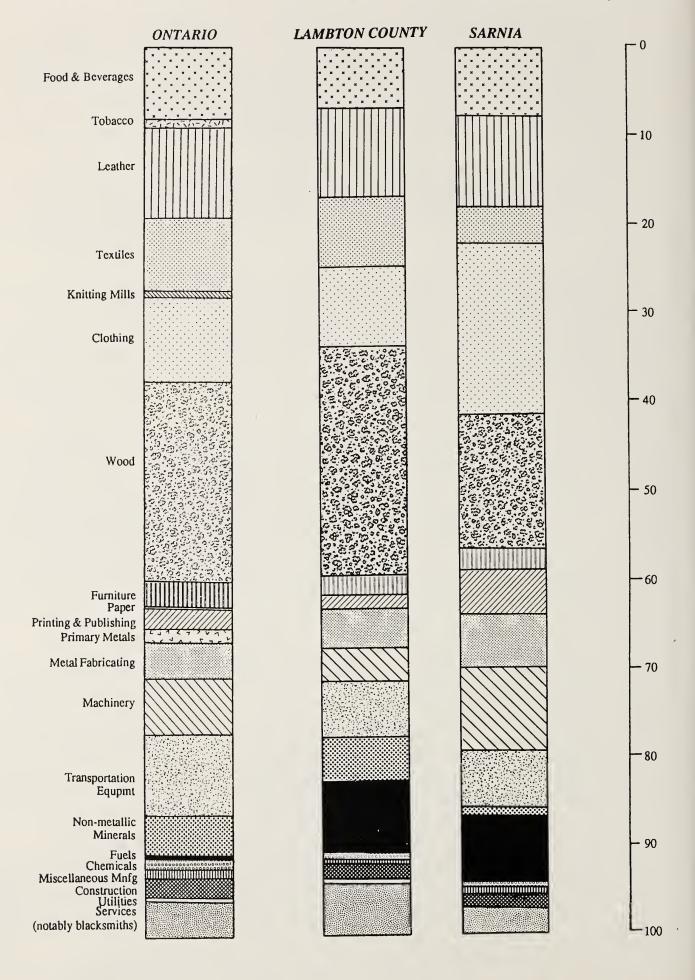
The diagram also illustrates the industrial structure of Sarnia separately, showing the relative strength of clothing, printing and publishing, metal fabricating, and especially of oil processing, all sectors which employed at least 1.5 times their shares in Ontario as a whole.

Most establishments in Lambton County were very small craftshops—blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Eighty-seven per cent of its workplaces in the county had five or fewer workers, slightly more than the share of small workplaces in all Ontario. John Nichol's flax mill in Bosanquet Township employed 22, making it the county's largest workplace. The largest outputs of over \$100,000 each were reported by two oil refineries and one sawmill which were capital-intensive and used steam power and small numbers of employees. These were the Black Star Oil Works of Sarnia, the Carbon Oil Company of Petrolia, and the Day sawmill of Sombra Township.

Like Essex and Kent, Lambton County was remarkable for its lack of water-powered industrial activity. Over 70 per cent of its output was supported by steam engines, compared with a mean of 36 per cent across Ontario. Very few women or girls were employed in the industrial workplaces of Lambton County; they formed under 11 per cent of the total workforce, mainly in the small clothing shops of Sarnia.



COMPARATIVE INDUSTRIAL STRUCTURES: Percentages Employed in Major Industry Groups (SECs)



		OBSERV	> -	FORCE	<u> </u>	FIXCAP	9	TOTEMP	- -	SUMPROC	သင္သ	VADD	
		NOS	PERC-	SUM	PERC-	NOS	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- BNT
COUNTY	SEC	+											
LAMBTON	1		0.2	9	0.3	120	0.0	7	0.2	540	0.0	•	•
	5.01	27	6.2	353	19.8	112000	21.0	70	5.8	319202	15.5	72188	7.0
	5.04	102	16.0	12	0.7	33498	6.3	122	10.1	107494	5.2	56684	5.5
	5.05	48	11.0	199	11.2	29069	5.4	95	7.9	42950	2.1	12744	1.2
	5.07	34	7.8		-	23685	4.4	109	0.6	62409	3.0	22275	2.1
	5.08	80	18.3	842	47.2	97961	18.4	315	26.1	562625	27.3	346922	33.4
	5.09	12	2.7	26	1.5	7600	1.4	28	2.3	20090	1.0	15160	1.5
	5.11	3	0.7	6	0.5	11690	2.2	15	1:2	8000	0.4	5400	0.5
	5.12	-	0.2	10	9.0	3000	0.6	4	0.3	1500	0.1	200	0.0
	5.13	20	4.6	8	0.4	15450	2.9	20	4.1	46075	2.2	26459	2.6
	5.14	11	2.5	09	3.4	19150	3.6	51	4.2	35045	1.7	24235	2.3
	5.15	25	5.7	•	-	15445	2.9	75	6.2	53538	2.6	40239	3.9
	5.17	17	3.9	14	0.8	4115	0.8	59	4.9	16198	8.0	11927	1.1
	5.18	15	3.4	242	13.6	138290	25.9	97	8.0	727619	35.3	361989	34.9
	5.19	11	2.5	2	0.1	2405	0.5	15	1.2	7808	0.4	5569	0.5
	5.2	2	0.5	٠	•	100	0.0	2	0.2	1404	0.1	1104	0.1
	9	4	0.9	٠	•	525	0.1	24	2.0	2000	0.1	1610	0.2
	8	4	0.9	•	-	570	0.1	3	0.2	1700	0.1	1420	0.1
	10	53	12.1	•	-	18955	3.6	70	5.8	43915	2.1	31106	3.0
ALL		438	100.001	1783	100.00	533628	100.00	1206	100.0	1206 100.0 2060112	1	100.0 1037531	100.0

COUNTY=LAMBTON

A large, inland county in eastern Ontario, Lanark County included farms, woodland and small towns and villages. The county's rural population peaked in the 1860s and was low at 22.4 persons per square mile, compared with counties in central and southwestern Ontario. The eastern and south-central parts of the county were traversed by railway lines. More industrialized than most of southern Ontario, the mean value of industrial production per capita (\$87.70) was higher than the provincial mean (\$74.00). The average 4.3 employees per industrial establishment in Lanark was close to the Ontario mean, though the mean value of output per establishment was lower at \$4,678 than the Ontario mean of \$5,516.

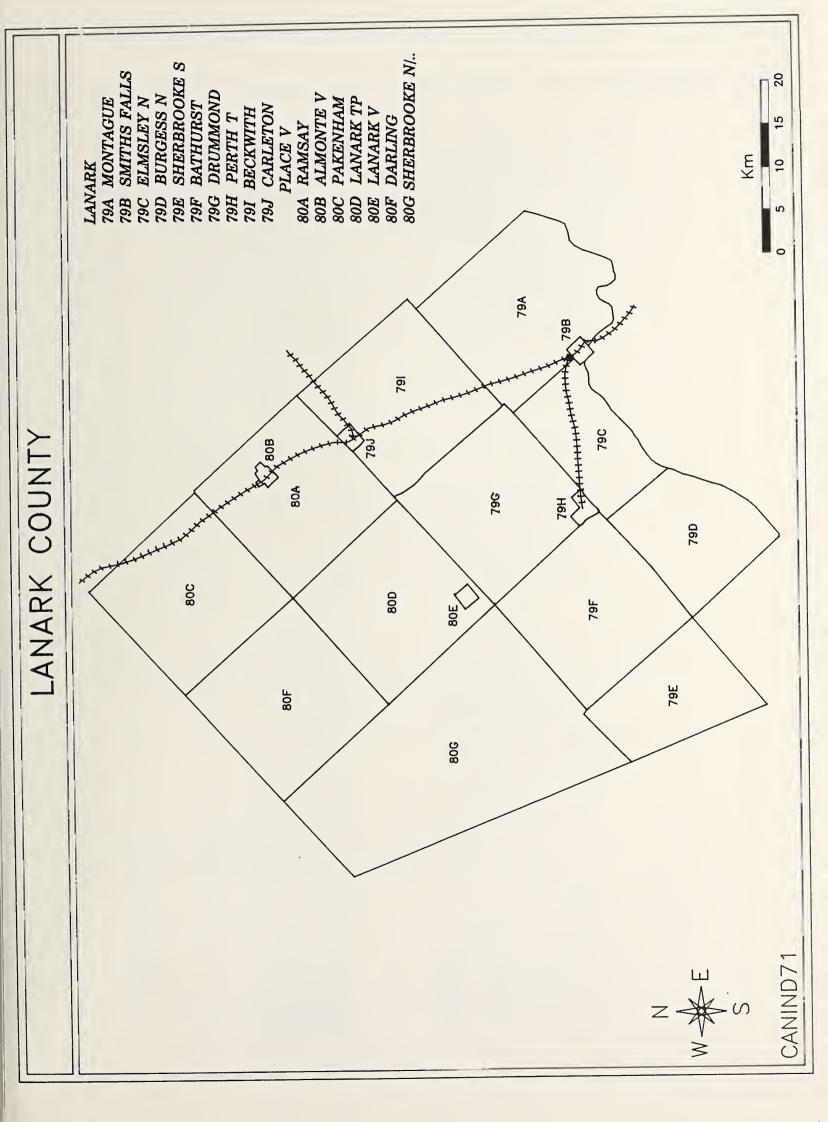
Nearly 23 per cent of the county's 33,020 people lived in the town of Perth or incorporated villages of Almonte (2,080), Carleton Place (1,205), Lanark (740), or Smiths Falls (1,150). Businesses in these five centres produced just two-thirds of the total industrial output of the county. Compared with other urban centres in Ontario, those of Lanark County were remarkably highly industrialized and specialized in particular sectors. Smiths Falls, Carleton Place and Almonte each reported well over one in four of their populations working in mills, factories and workshops; Lanark also had more industrial employment than the provincial mean. More than seven in ten of the industrial workers of Carleton Place were in the wood processing sector, over 65 per cent of those in Almonte were in woollen textiles, and nearly 45 per cent of the workers in Smiths Falls were in engineering trades.

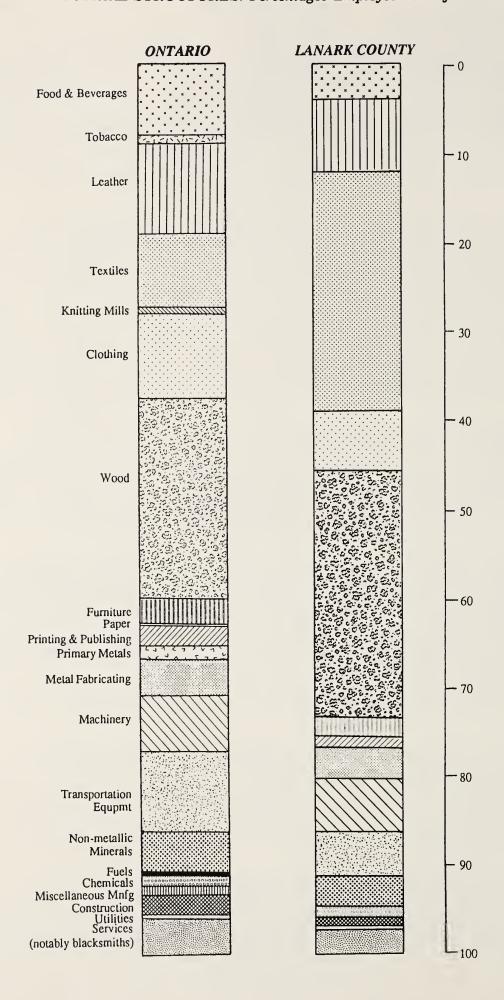
When Lanark County's industrial structure is compared with that of Ontario as a whole, we find that the textile sector was distinctively more than three times stronger in the county than generally in the province, while the large wood processing sector was about the same. The diagram overpage has been designed to illustrate the county and provincial structures, using employment in major industry groups (SECs in the database). Otherwise Lanark's industry mix was very well balanced.

Most of Lanark County's industrial units were small craftshops --blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Over 86 per cent of the county's workplaces reported five or fewer employees, more than the proportion of small workplaces in Ontario generally. But two enterprises were so large as to rank among the top one per cent of Canada's industrial businesses in 1871 -- the huge Rosamond woollen mill in Almonte where 209 employees manufactured \$350,000 worth of cloth, and the Cossitt Brothers foundry in Smiths Falls with 65 workers and an output worth \$107,000. Three other workplaces employed more than 50 workers each and two more between 26 and 50 employees each.

In providing motive power for industrial activity, waterwheels were much more significant than steam engines or hand power in Lanark County. Water power, harnessed on the many rivers and streams flowing over the edge of the Shield, notably the Mississauga and its tributaries, provided a great resource for local industry. Waterwheels supported 64 per cent of industrial output in the county, compared with a provincial mean of 29 per cent.

Women and girls formed a significantly higher proportion (nearly one fifth) of the industrial workforce in Lanark County than in Ontario generally. The Rosamond woollen textile mill in Almonte was by far the largest employer of female labour. The four woollen mills in the village together employed 178 women and 25 girls, females making up over 37 per cent of local industrial workforce.





		OBSERV	Δ	FORCE	E E	FIXCAP	A _j	TOTEMP	<u>-</u>	SUMPROC	၁၀	VADD	
		MUS	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	NOS	PERC- BNT	NOS	PERC- ENT
COUNTY	SEC												
LANARK	5.01	38	6.1	791	22.7	147400	13.0	78	2.9	491990	17.0	69978	0.9
	5.04	06	14.5	83	2.4	56432	5.0	222	8.3	218733	1.6	102126	8.7
~	5.05	127	20.5	638	18.3	456844	40.2	728	27.3	862999	29.8	294274	25.1
	5.06	2	0.3	•	•	253	0.0	2	0.1	1255	0.0	526	0.0
	5.07	40	6.5	٠	•	20002	1.8	176	9.9	101670	3.5	37505	3.2
	5.08	111	17.9	1706	49.0	234978	20.7	742	27.8	627372	21.7	295913	25.3
	5.09	20	3.2	32	6.0	18160	1.6	63	2.4	35120	1.2	24869	2.1
	5.11	4	0.6	4	0.1	13000	1:1	22	0.8	14980	0.5	10649	6.0
	5.12	9	0.5	29	0.8	2250	0.2	10	0.4	11000	0.4	7600	9.0
	5.13	20	3.2	56	1.6	51320	4.5	93	3.5	76075	2.6	46368	4.0
	5.14	10	1.6	66	2.8	86200	7.6	161	0.9	240860	8.3	151591	12.9
	5.15	48	7.8	1	0.0	22765	2.0	132	4.9	96370	3,3	59150	5.1
	5.17	32	5.2	26	0.7	8798	0.8	91	3.4	38172	1.3	19310	1.6
	5.19	16	2.6	16	0.5	4123	0.4	39	1.5	16102	9.0	9413	0.8
	5.2	1	0.2	·	•	26	0.0	1	0.0	200	0.0	152	0.0
	9	5	0.8	•	•	870	0.1	21	0.8	13350	0.5	7650	0.7
	8	9	1.0	٠	•	980	0.1	8	0.3	2450	0.1	2060	0.2
	10	46	7.4	•	•	11930	1.0	81	3.0	47251	1.6	32064	2.7
ALL		619	100.0	3481	100.0	100.0 1136331 100.0	100.0	2670	100.01	2670 100.0 2895949		100.0 1171198	100.0

---- COUNTY-LANARK ----

Administered together as one unit, the Leeds and Grenville geographic counties extended more than 70 miles along the north shore of the St Lawrence River. Settled from the late eighteenth century, but past its peak of rural population in the early 1860s, this large region had average rural population densities between 31 and 39 persons per square mile in 1871. It was well served by railways, with the Grand Trunk line running the length of the county close to the St Lawrence and branch lines extending inland from Brockville and Prescott. The average value of industrial production per capita (\$70.88) was close to the mean for the province (\$74), and the scale of operation was smaller with an average 3 employees per industrial establishment (4.4 per cent in Ontario) and a mean value of output per establishment of \$3,393 (\$5,516 in Ontario).

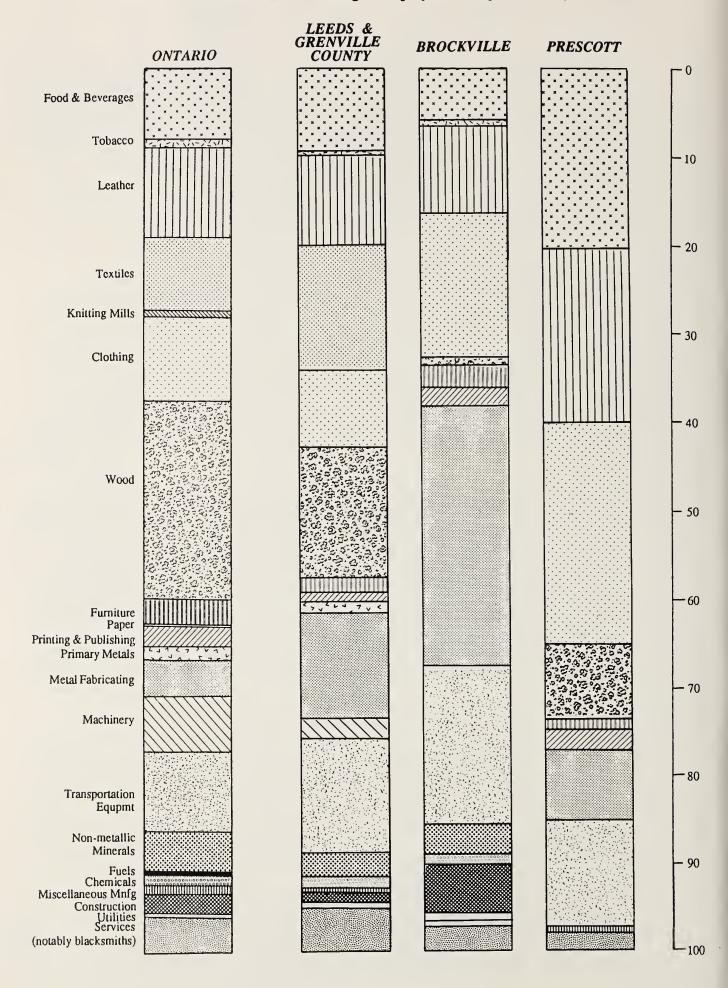
One in five of the total Leeds and Grenville population of 57,918 lived in the towns of Brockville (5,102 people) or Prescott (2,617) or the villages of Gananoque (2,020), Kemptville (872) or Merrickville (923), which together produced nearly half of the county's total industrial output. Outside these incorporated urban centres, Edwardsburg Township had the highest industrial statistics. Lyn (750 people in Elizabethtown Township) was the only unincorporated village with more than 500 people. Brockville and Gananoque (most remarkably) were both highly industrialized and specialized in particular industry types. Over 20 per cent of Gananoque's people were employed in factories and workshops; nearly one third of these industrial workers made transportation equipment and nearly another third was in the metal fabricating sector.

When Leeds and Grenville's industrial structure is compared with that of all Ontario, we see a well-balanced mix that was fairly typical of the province as a whole. The diagram overpage has been designed to illustrate the county and provincial structures, using employment in major industry groups (SECs in the database). Sectors which employed at least 1.5 their mean shares were textiles, metal fabricating, and transportation equipment. The diagram also illustrates contrasting industrial structures of Brockville and Prescott in relation to those of Leeds and Grenville County and the whole province. Some of the differences between the towns and whole county reflect urban-rural contrasts, clothing, metals and engineering, and construction being typically concentrated in towns. Brockville's strong sectors were metals, transport equipment, clothing and construction, while Prescott was strong in food and beverages, clothing and leather products.

Most of Leeds and Grenville County's industrial establishments were small craftshops, over 91 per cent of all workplaces reporting five or fewer employees. Only one enterprise ranked among the top one per cent of Canada's industrial businesses: the Brockville foundry and stove factory of James Smart employed 160 and produced \$140,000 worth of output. Four other workplaces reported over 50 workers each, and another nine employed between 26 and 50 each. A notable feature of this county was the recorded work of women and girls who made up one fifth of the county's industrial workforce. Many of them, especially in most westerly tier of townships running inland from Gananoque, were hand weavers labouring in domestic workshops.

In providing motive power for industrial activity, waterwheels were much more significant than steam engines or hand power in Leeds and Grenville County. Water power supported 52 per cent of industrial output in the county, compared with a provincial mean of 29 per cent. The region ranked third behind Ottawa-Carleton and Northumberland-Durham in reported water-power capacity.

20 68A BROCKVILLE WEST 68B BROCKVILLE CENT 68C BROCKVILLE EAST 70D MERRICKVILLE V 68D ELIZABETHTOWN 15 69C EDWARDSBURG 70F KEMPTVILLE V 70G GOWER S 69B PRESCOTT T 70E OXFORD TP X B 9 70C WOLFORD 69A AUGUSTA 70B ELMSLEY 70A KITLEY S 269 LEEDS AND GRENVILLE COUNTY 70G 68 A-C **69** 70E 680 70C 70D/ **67E** 67D 67F 70A 70B 67A 67C 67 **67**G 67H 67D ESCOTT FRONT 67F YONGE/ESCOTT 67E YONGE FRONT 67B GANANOQUE V LEEDS/GRENVILLE DOWNE FRONT 67A LEEDS/LANS-67C LEEDS/LANS-DOWNE REAR BURGESS S 67H CROSBY N 67G CROSBY S 67I BASTARD/-CANIND71 REAR



		OBSERV	<u> </u>	FORCE	—-	FIXCAP	<u>—</u> .	TOTEMP		SUMPROC	ည	VADD	
		SUM	PERC- ENT	SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC												
LEEDS-GRENVILLE	5.01	87	7.2	1465	30.8	438355	32.7	307	8.5	1670265	40.7	748112	35.4
	5.02	1	0.1	•	-	15	0.0	ស	0.1	2877	0.1	7771	0.1
	5.04	164	13.6	172	3.6	135677	10.1	387	10.8	367201	8.9	192602	9.1
	5.05	391	32.3	286	6.0	67311	5.0	515	14.3	263774	6.4	75965	3.6
	5.07	57	4.7	•		29432	2.2	310	8.6	205311	5.0	85910	4.1
	5.08	145	12.0	1940	40.8	165760	12.3	539	15.0	433207	10.6	297882	14.1
	5.09	24	2.0	62	1.3	12130	6.0	57	1.6	39457	1.0	31291	1.5
	5.11	8	0.7	3	0.1	18400	1.4	31	6:0	15039	0.4	11717	9.0
	5.12	4	0.3	28	9.0	10200	0.8	50	1.4	30210	0.7	13744	9.0
	5.13	37	3.1	386	8.1	181700	13.5	447	12.4	440999	10.7	245430	11.6
	5.14	14	1.2	133	2.8	14935	1.1	75	2.1	70781	1.7	45534	2.2
	5.15	81	6.7	178	3.7	153238	11.4	456	12.7	309942	7.5	192764	9.1
	5.17	35	2.9	7	0.1	5888	0.4	106	3.0	39402	1.0	25295	1.2
	5.19	22	1.8	30	0.6	44685	3.3	38	1.1	54391	1.3	22837	1.1
	5.2	4	0.3	18	0.4	1100	0.1	13	0.4	7600	0.2	5400	0.3
	9	10	0.8	8	0.2	5410	0.4	48	1.3	43839	1.1	32501	1.5
	7	1	0.1	•		24000	1.8	5	0.1	2600	0.1	3800	0.2
	8	5	0.4	٠	-	1150	0.1	6	0.3	4700	0.1	4040	0.2
	10	120	6.6	44	0.9	32980	2.5	193	5.4	100707	2.5	79122	3.7
ALL		1210	1210 100.0	4760	100.001	4760 1100.0 1342366 1100.0	100.001	3591	100.0	4105302	100.0	3591 100.0 4105302 100.0 2115723 100.0	100.0

--- COUNTY-LEEDS-GRENVILLE ----

LENNOX AND ADDINGTON COUNTY

Long and narrow, Lennox and Addington County comprised a cross-section of economic landscape from maturely developed farms and small towns and villages close to the Bay of Quinte shore in the south to the northern townships that were still part of the pioneer fringe. The Grand Trunk Railway connected the county town of Napanee with Belleville to the west and Kingston in the east.

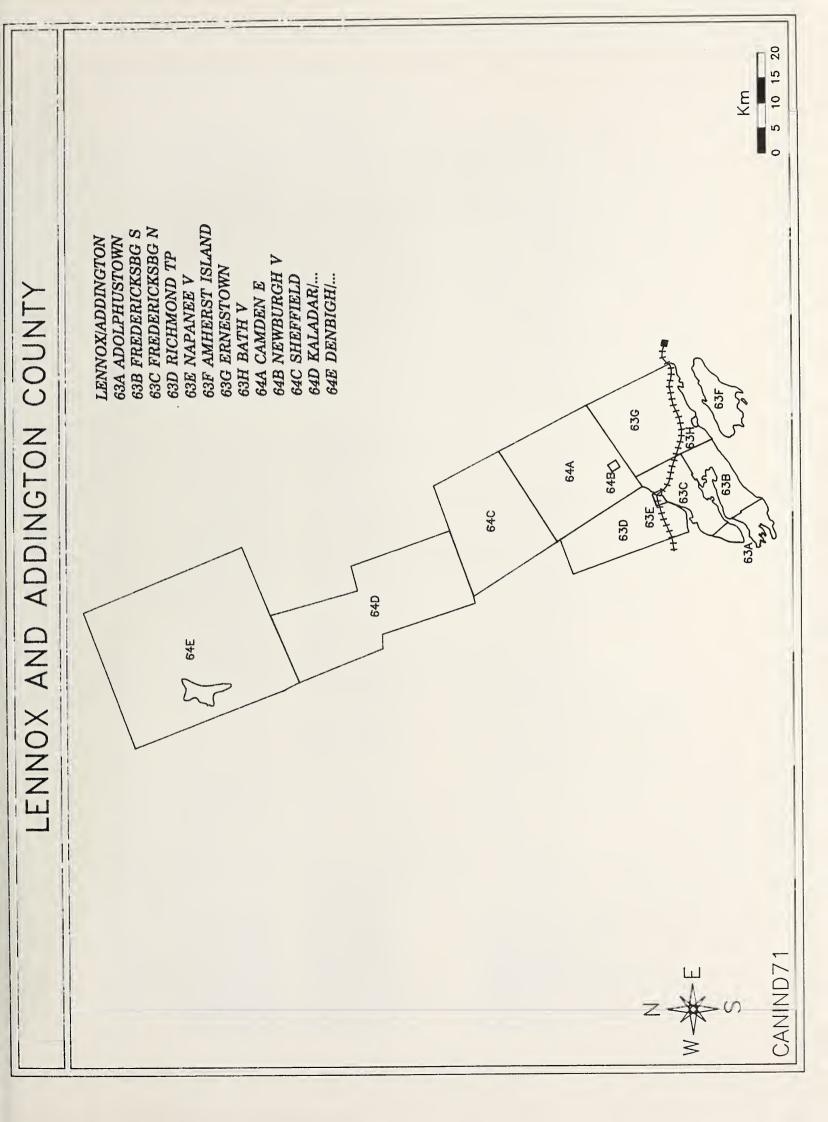
Lennox and Addington's mean value of industrial production per capita (\$46.80) was significantly lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 3.2, compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also much lower -- \$3,238 compared with \$5,516.

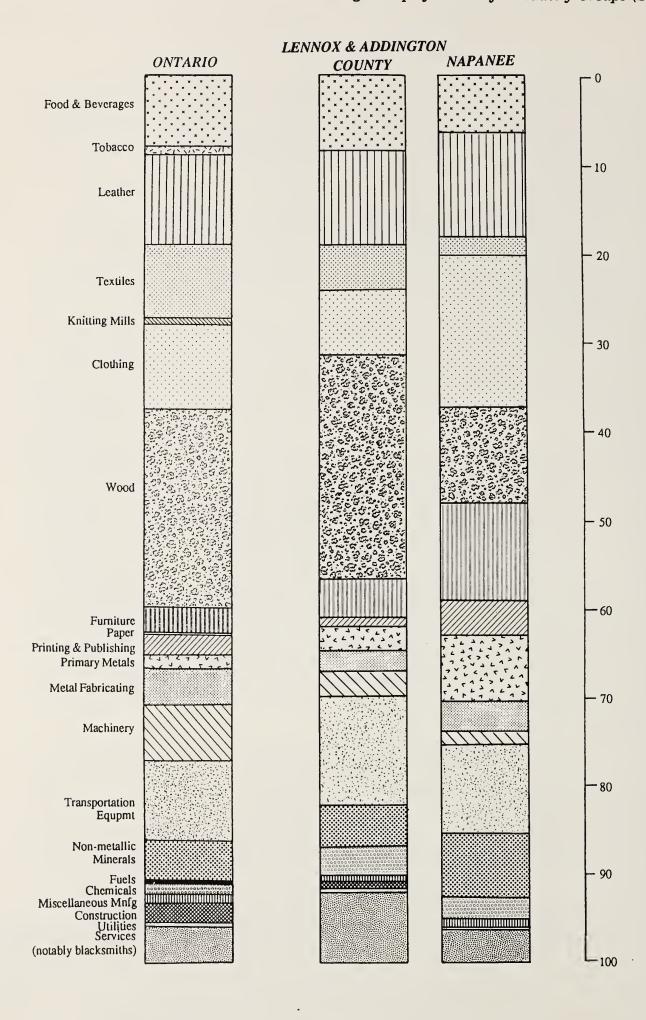
Of the county's total population of 26,705, one in six lived in the town of Napanee (2,967 people) or the villages of Newburgh (828) or Bath (601) which together produced well over half the county's industrial output. Napanee, a typical county town, was less industrialized than the mean for all urban centres in the province, though it had a few notable enterprises. Camden East Township had the best industrial statistics of any of the rural townships.

When the industrial structure of Lennox and Addington County is compared with that of the province as a whole, we find a mix of industry generally typical of rural Ontario. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the Wood processing, furniture, primary metals, transportation database). equipment, chemicals, and blacksmiths were relatively stronger locally. The diagram also illustrates the industrial structure of Napanee in relation to those of the county and province. Some of the differences in industrial structure between town and county reflect urban-rural contrasts. Textile mills (and other cloth production) were typically located in rural areas and small villages, while the making of clothing was concentrated in urban places. Metals, machinery and engineering were more intensive in the towns and cities, while blacksmiths were more typical in the countryside than in the towns. Clothing, furniture, printing and publishing, primary metals, and non-metallic minerals were sectors which in Napanee employed at least 1.5 times their average shares across Ontario.

Most of Lennox and Addington County's industrial establishments were small craftshops, more than 87 per cent of all workplaces reporting five or fewer employees. No factories or mills ranked among the top one per cent of Canada's industrial businesses; indeed no workplaces reported more than 25 employees. Only four factories employed between 26 and 50 workers. These were John Herring's foundry and John Gibbard's furniture factory, both in Napanee, two Rathbun sawmills in Richmond and Camden East Townships, and a business making hubs for carriage wheels and grain measures.

Waterwheels were much more important than steam engines or manual labour in providing motive power for industry in Lennox and Addington. Water power supported 60 per cent of industrial output, compared with a provincial mean of 29 per cent.





		OBSERV		FORCE	<u> </u>	FIXCAP	<u>-</u> -	TOTEMP	- d	SUMPROC	၂	VADD	
		SUM	PERC-	SUM	PERC- BNT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY) as												
LENNOX-ADDINGTON	5.01	40	10.4	1180	39.4	136100	32.3	93	7.6	486122	38.9	77305	14.7
	5.04	62	16.1	26	0.9	19478	4.6	128	10.5	102506	8.2	50500	9.6
	5.05	16	4.1	139	4.6	40502	9.6	62	5.1	64256	5.1	24118	4.6
	5.07	26	6.7	-	-	11454	2.7	89	7.3	70570	2.6	33886	6.4
	5.08	63	16.3	1278	42.7	82080	19.5	312	25.6	177241	14.2	89192	16.9
	5.09	10	2.6	99	2.2	16900	4.0	53	4.3	49865	4.0	27222	5.2
	5.11	3	0.8	•	-	0069	1.6	16	1.3	13000	1.0	10800	2.1
	5.12	1	0.3	30	1.0	8000	1.9	30	2.5	30000	2.4	20000	3.8
	5.13	10	2.6	45	1.5	7800	1.9	30	2.5	23000	1.8	12800	2.4
	5.14	13	3.4	81	2.7	18450	4.4	36	2.9	32667	2.6	25335	4.8
	5.15	35	9.1	73	2.4	32695	7.8	151	12.4	79880	6.4	60807	11.6
	5.17	14	3.6	74	2.5	18875	4.5	67	5.5	31383	2.5	26646	5.1
	5.19	11	2.8	-	•	7841	1.9	30	2.5	35270	2.8	27852	5.3
	5.2	4	1.0		-	175	0.0	8	0.7	4892	0.4	2982	9.0
	9	4	1.0		•	950	0.2	8	0.7	2270	0.2	1010	0.2
	8	2	0.5	•	•	200	0.1	2	0.2	2400	0.2	2000	0.4
	10	72	18.7	•	-	12167	2.9	106	8.7	44580	3.6	33893	6.4
ALL		386	100.00	2662	100.0	420867	100.0	1221	100.00	1221 100.0 1249902 100.0	100.0	526348 100.0	100.0

LINCOLN COUNTY

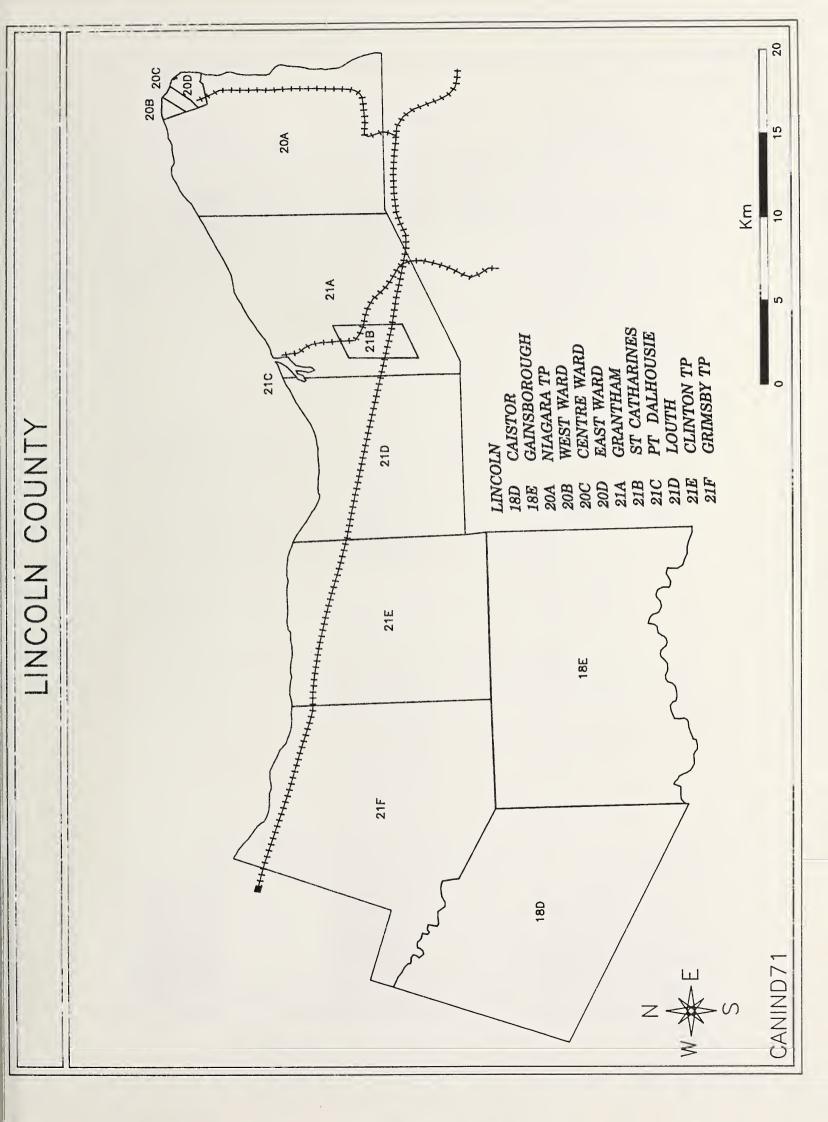
Settled since the 1790s, Lincoln County was part of the most maturely developed zone of southern Ontario by 1871. Two factors stimulated more intensive industrialization in Lincoln County -- the traffic attracted by the Welland Canal, railways and the international border, and the water-power generated as part of the canal operations. The mean value of industrial production per capita (\$133.45) was nearly twice the mean for Ontario (\$74.00). The average number of employees per industrial establishment was 6.1 in Lincoln compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also significantly higher -- \$8,743. compared with \$5,516.

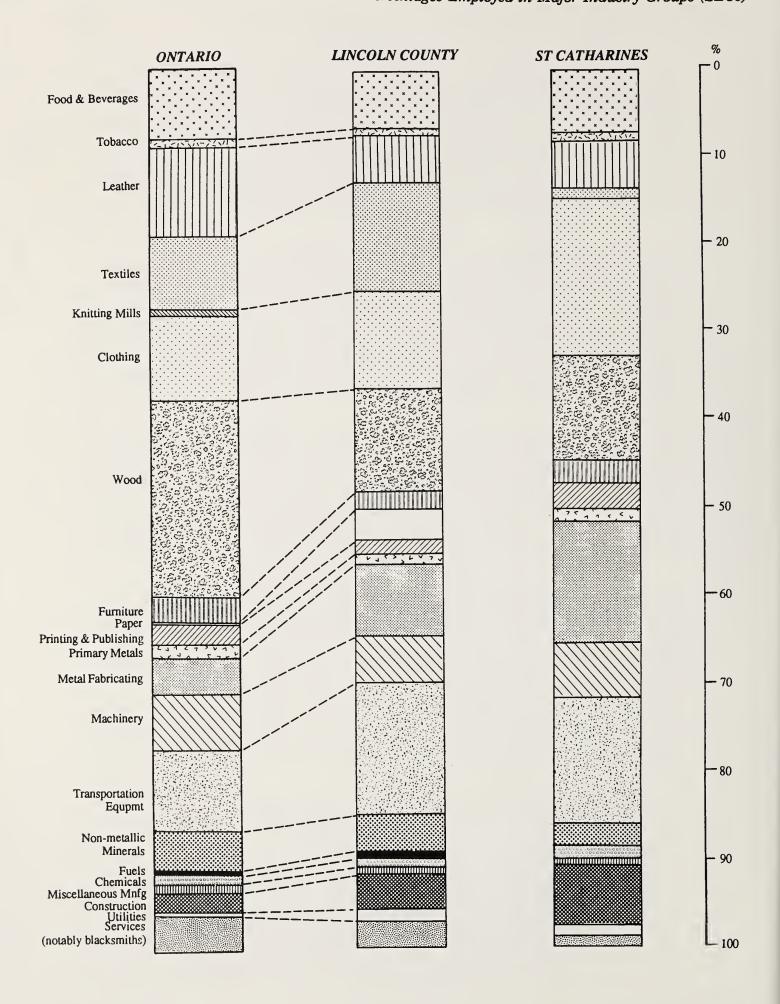
Industrial activity was highly concentrated in and around the county town of St Catharines, which accounted for over half Lincoln County's industrial workers and 65 per cent of its gross value of industrial production. Of the town's total population of 7,864 in 1871, 1,408 or nearly one fifth were employed in industrial mills, factories or workshops. Grantham Township, surrounding St Catharines and including the unincorporated factory village of Merritton, had 578 industrial workers while Port Dalhousie, an incorporated village three miles from St Catharines on Lake Ontario, had 143 industrial employees. Niagara, formerly the colonial capital of Newark, had practically the lowest level of industrial activity of any Ontario urban centre in 1871.

When Lincoln County's industrial structure is compared with that of all Ontario, we find that several sectors were significantly stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups. Textiles, paper, metal fabricating, transportation equipment and construction were sectors which in Lincoln County employed at least 1.5 times their share in Ontario generally. Leather and wood products, on the other hand, were under-represented in Lincoln County compared with their general strength in the province.

The diagram also illustrates the industrial structure of St Catharines in relation to all of Lincoln County and Ontario as a whole. Some features of industry types in St Catharines reflect the strength of particular enterprises. A notable example is the was the firm of Tuttle, Date and Rodden, later Welland Vale, which employed 120 men in the manufacture of agricultural hand tools. Compared with other large towns and cities of Ontario, St Catharines combined above-average industrial activity with a diversified industrial structure not dominated by any particular sector or enterprise. In these qualities, St Catharines resembled Toronto, Hamilton and Peterborough, rather than towns and cities such as Ottawa, Brantford, Guelph, Brockville, Galt, Oshawa, Ingersoll and Dundas which were specialized in particular sectors as well as highly industrialized.

Most of Lincoln County's industrial establishments were small craftshops—blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. But three local businesses ranked among the Canada's industrial leaders (the top one per cent) in 1871—Tuttle, Date and Rodden of St Catharines, and John Riordan's paper mills and the Lybster Cotton Mills, both of Merritton. Water power, developed in connection with the Welland Canal, was clearly more important than steam power for the largest enterprises in this region. Seven firms, including the three industrial leaders named above, reported using waterwheels with at least 100 horsepower capacity. In sum, waterwheels supported 55 per cent of the county's industrial output, compared with a mean of 29 per cent across Ontario.





		OBSERV	A.	FORCE	貿	FIXCAP	AP	TOTEMP	49	SUMPROC	၁၀	VADD	
		SUM	PERC- ENT	NOS	PERC- ENT	SUM	PERC- ENT	SUM	PERC- BNT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC		-										
LINCOLN	4	ਜ ⁻	0.2	•	•	200	0.0	0	0.0	400	0.0	0	0.0
	5.01	45	10.0	718	23.8	153200	13.8	181	9.9	1621826	41.1	221954	14.3
	5.02	2	0.4	8	0.3	1750	0.2	20	0.7	13480	0.3	11295	0.7
	5.04	53	11.8	14	0.5	12634	1:1	157	5.7	124053	3.1	71790	4.6
	5.05	21	4.7	420	13.9	203830	18.3	334	12.2	277418	7.0	129712	8.3
	5.07	54	12.0		•	4335	0.4	303	11.1	252911	6.4	97993	6.3
	5.08	19	14.9	939	31.1	101846	9.2	342	12.5	262957	6.7	121256	7.8
	5.09	14	3.1	9	0.2	8630	0.8	51	1.9	37700	1.0	25680	1.6
	5.1	1	0.2	200	9.9	156000	14.0	100	3.6	160000	4.1	00006	5.8
	5.11	6	2.0	4	0.1	18600	1.7	45	1.6	28000	0.7	19800	1.3
	5.12	2	0.4	10	0.3	18150	1.6	28	1.0	26000	0.7	15815	1.0
	5.13	19	4.2	413	13.7	126930	11.4	227	8.3	268600	6.8	164970	10.6
	5.14	16	3.5	92	3.1	29000	5.3	143	5.2	143842	3.6	108247	7.0
	5.15	34	7.5	152	5.0	101195	9.1	412	15.0	343557	8.7	240292	15.4
	5.17	23	5.1	16	0.5	11550	1.0	121	4.4	45774	1.2	30620	2.0
	5.18	2	0.4	21	0.7	25500	2.3	17	9.0	136500	3.5	96050	6.2
74.	5.19	6	2.0		-	0006	0.8	31	1.1	40030	1.0	15680	1.0
	5.2	13	2.9	•	-	1345	0.1	26	0.9	10096	0.3	5294	0.3
	9	14	3.1	9	0.1	6125	9.0	109	4.0	84721	2.1	44899	2.9
	7		0.2	•	-	80000	7.2	9	0.2	15000	0.4	9500	9.0
	8	2	1:1	•		525	0.0	6	0.3	5120	0.1	3265	0.2
	10	46	10.2		•	10830	1.0	78	2.8	45239	1.1	33389	2.1
ALL		451	100.00	3016	100.00	1111175	100.0	2740	100.0	3943224	100.0	1557501	100.0

--- COUNTY-LINCOLN ---

MIDDLESEX COUNTY

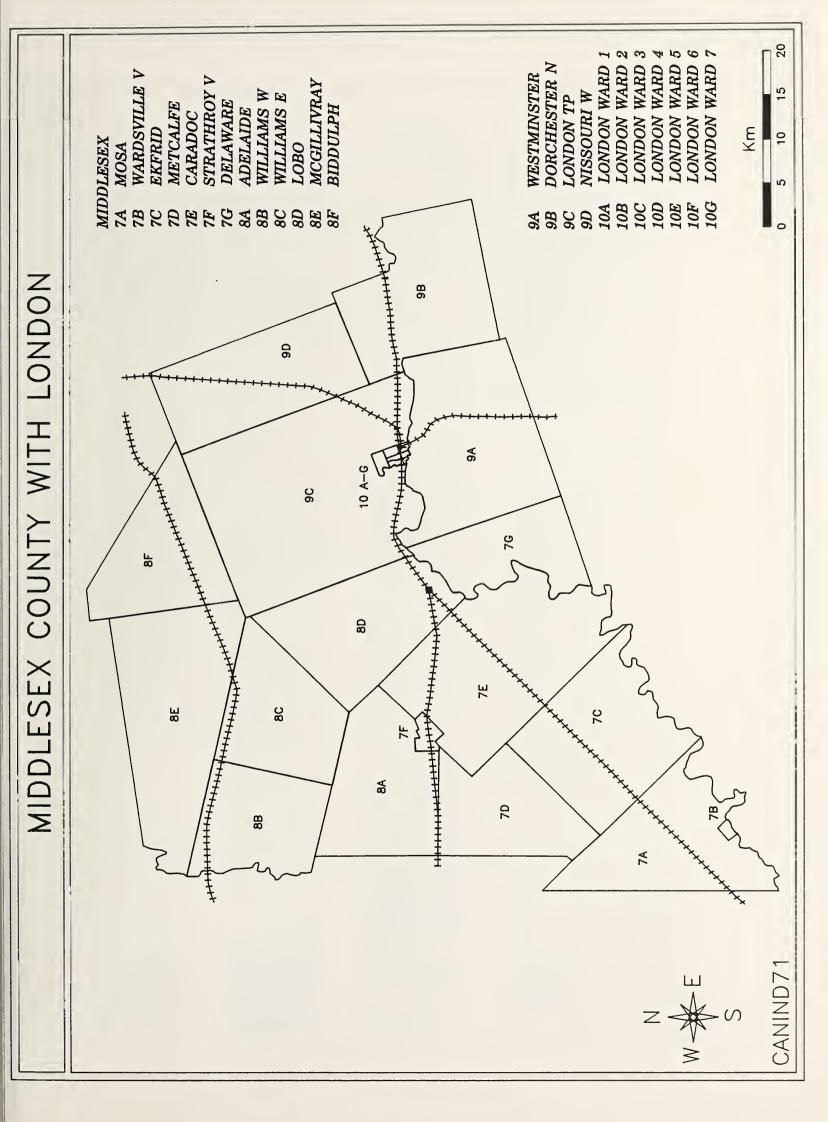
A large inland region in southwestern Ontario settled since the 1820s, Middlesex County was maturely developed by 1871. Its rural population density averaged 51 persons per square mile, not far behind the highest rural densities in York, Wentworth, Lincoln, Waterloo, Oxford and Brant Counties. Middlesex was well served with railways, the Great Western and several branch lines through the south and centre and the Grand Trunk Railway crossing the northern tier of townships. The county's mean value of industrial production per capita (\$92.95) was well above the mean for Ontario (\$74.00). The average number of employees per establishment was 4.8 in Middlesex compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also significantly higher -- \$7,786 compared with \$5,516.

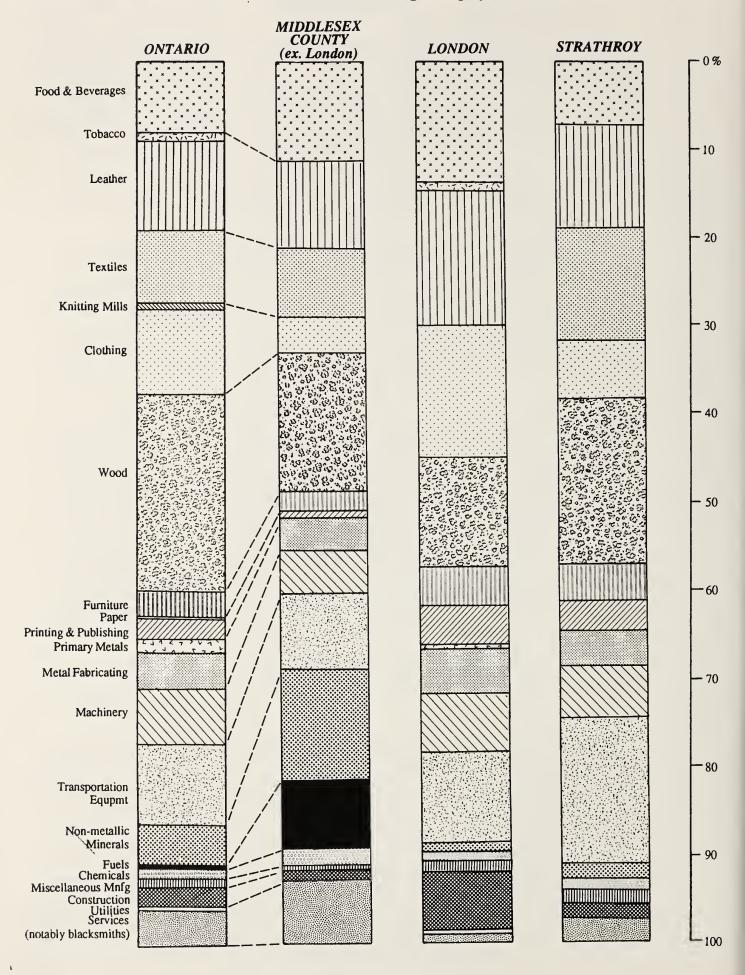
Nearly one in four of the county's 82,595 people lived in the city and county seat of London (population 15,826), town of Strathroy (3,232) or village of Wardsville (539). These three urban centres accounted for 54 per cent of the county's total industrial production. However, compared with other Ontario urban centres, none in Middlesex was highly industrialized, all having less than the provincial mean proportion of its people employed in industry and all lacking specialization in particular sectors. Because of its size, however, London was a major industrial centre. The largest of the county's unincorporated villages were Ailsa Craig (750), Glencoe (700), Lucan (1,000), Newbury (1,000), Parkhill (1,500) and Westminster (600).

When Middlesex County's industrial structure is compared with that of the whole province, we find a well-balanced mix of industry types in which several sectors were significantly stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups. Non-metallic minerals, fuels, chemicals and blacksmiths were sectors which in Middlesex County employed at least 1.5 times their share in all Ontario. Wood products, on the other hand, were under-represented compared with their general strength in the province. The diagram also illustrates the industrial structures of London (separated from the Middlesex County structure) and Strathroy. London had a diversified structure typical of larger cities of the day. Foods, leather products, clothing, furniture, printing and publishing and, especially, construction were sectors which in London employed at least 1.5. their mean shares in Ontario generally. Textiles and transportation equipment were strong in Strathroy.

Steam power was clearly more important than water power in this county. Steam engines powered just under half the total value of output, compared with a mean of 36 per cent across Ontario.

Most of Middlesex County's industrial establishments were small craftshops - blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. But the proportion of such small workplaces was smaller than in Ontario generally. Twenty-eight firms employing more than 25 workers (6 of them with more than 50). There were also five oil refineries in London Township where small numbers of workers produced at least \$100,000 worth of output in each establishment. Three local businesses ranked among the Canada's industrial leaders (the top one per cent) in 1871. At the Strathroy woollen mill of J.A. Scoon, 57 employees (including 20 women and 4 girls) produced \$90,000 worth of output. George Moorhead's furniture factory in London employed 68 in the manufacture of \$150,000 worth of goods for wholesale and retail customers. The J. McClary foundry of London reported 73 workers producing stoves, implements and tinware valued at \$100,000. All three were powered by steam.





		OBSERV	Ω.	FORCE	E C	FIXCAP	a.	TOTEMP	47	SUMPROC	Soc	VADD	
		SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERCENT
COUNTY	SEC												
MIDDLESEX		2	0.2	14	0.4	140	0.0	2	0.0	260	0.0	-440	-0.0
	5.01	126	12.8	1417	38.8	502990	23.8	572	12.0	228223	29.7	378361	11.2
	5.02	3	0.3			6040	0.3	17	0.4	13100	0.2	5500	0.2
	5.04	132	13.4	101	2.8	157495	7.4	603	12.7	670289	8.7	352630	10.5
	5.05	99	6.7	214	5.9	94160	4.5	200	4.2	169218	2.2	64561	1.9
	5.07	80	8.1	•		55353	2.6	441	9.3	352857	4.6	147734	4.4
	5.08	108	11.0	1103	30.2	217528	10.3	999	14.0	782985	10.2	398357	11.8
	5.09	32	3.2	89	1.9	134900	6.4	174	3.7	284070	3.7	222446	9.9
	5.1		0.1			20	0.0	2	0.0	400	0.0	220	0.0
	5.11	9	0.6	18	0.5	37100	1.8	109	2.3	72000	6.0	40700	1.2
	5.12	1	0.1	8	0.2	2000	0.2	10	0.2	14000	0.2	6500	0.2
	5.13	36	3.7	75	2.1	99140	4.7	220	4.6	331135	4.3	127696	3.8
	5.14	34	3.4	215	5.9	140075	9.9	240	5.0	253975	3.3	189514	5.6
	5.15	95	9.6	84	2.3	131350	6.2	472	6.6	354288	4.6	215255	6.4
	5.17	67	6.8	28	1.6	41341	2.0	337	7.1	146587	1.9	114285	3.4
	5.18	16	1.6	208	5.7	238500	11.3	187	3.9	1425700	18.6	796845	23.6
	5.19	19	1.9	27	0.7	91450	4.3	63	1.3	112660	1.5	51161	1.5
	5.2	11	1.1	4	0.1	22990	1:1	46	1.0	57240	0.7	38560	1.1
	9	26	2.6	37	1.0	42210	2.0	186	3.9	223675	2.9	135075	4.0
	7		0.1			00009	2.8	6	0.2	19039	0.2	13115	0.4
	10	124	12.6		•	36889	1.7	200	4.2	111372	1.5	75044	2.2
ALL		986	100.0	3651	100.0	2114701	100.0	4756	100.0	7677103	100.0	3373119	100.0

--- COUNTY-MIDDLESEX ---

NORFOLK COUNTY

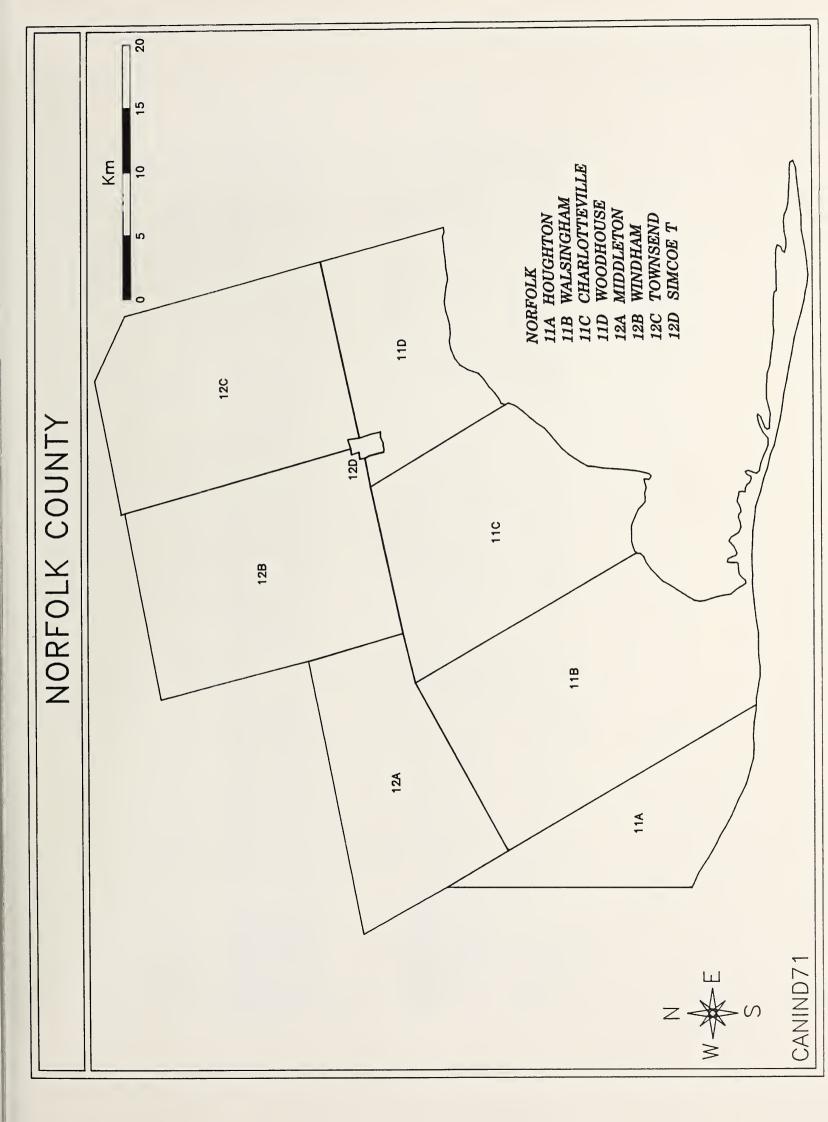
Settled from the end of eighteenth century, Norfolk County reached its peak rural population density of 46 persons per square mile in the early 1870s. Without any railway services by 1871, the county had not been much affected by industrialization on any scale. The county's mean value of industrial production per capita (\$43.28) was significantly lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 3 in Norfolk compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also much lower -- \$3,422 compared with \$5,516.

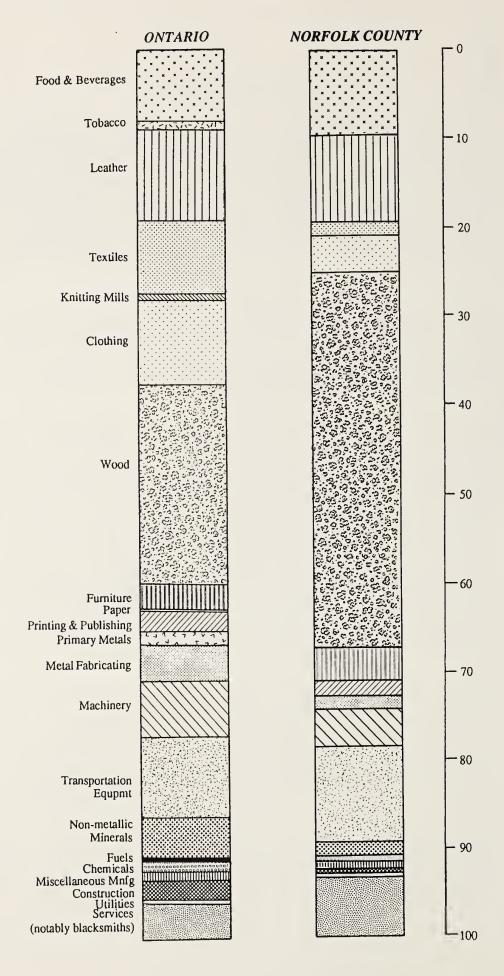
Of its total population of 30,760, only 6 per cent lived in the one incorporated urban centre of Simcoe (population 1,856), which accounted for 15 per cent of the county's modest industrial output. In addition, four unincorporated villages had at least 500 people each -- Port Dover with about 1,100, Port Rowan and Waterford with 900 each, and Vittoria with about 600. But these small centres were quite unremarkable for their industrial activity.

When Norfolk County's industrial structure is compared with that of all Ontario, the mix of industry types is found to be characteristic of rural areas. The diagram overpage has been designed to show these as clearly as possible, using major industry groups (SECs in the database). Wood processing, the largest industrial sector in Norfolk as in Ontario generally, was generally located outside urban areas and often on the margins of settlement. In Norfolk County, sawmilling and wood processing, mainly of hardwood species, employed twice the average proportion of the workforce. Sawmills coexisted with the processing of farm products in grist mills and tanneries. Textile production, usually located in rural areas and small villages, was notably under-represented in the county. While metal processing and fabricating and machinery were weaker than generally in Ontario, the manufacture of transportation equipment was somewhat stronger and blacksmiths were nearly twice as significant in the county as in the whole province.

Virtually all of Norfolk County's industrial establishments were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Eighty-eight per cent of workplaces in the county had five or fewer workers, a higher proportion than in Ontario generally. Norfolk County had none of Canada's industrial leaders in 1871 and, indeed, no establishments reporting more than 25 employees.

Industrial employees in Norfolk County were recorded in workplaces which were more smaller and more dependent on water power than in Ontario generally. Waterwheels powered more than 44 per cent of the county's industrial output, compared with a mean of only 29 per cent across the province.





		OBSERV	i v	FORCE	<u> </u>	FIXCAP	<u>-</u> -	TOTEMP	<u>e</u>	SUMPROC	ည	VADD	
		SUM	PERC-	SUM	PERC- ENT	SUM	PERC-	SUM	PERC- ENT	SUM	PERC-	MUS	PERC- ENT
COUNTY	SEC										 		
NORFOLK	5.01	45	11.6	618	24.2	146440	33.9	112	9.4	497605	37.4	126298	20.9
	5.04	52	13.4	192	3.0	29805	6.9	119	10.0	105784	7.9	54852	9.1
	5.05	11	2.8	57	2.2	9286	2.2	18	1.5	21890	1.6	9779	1.6
	5.07	18	4.6	•	•	6332	1.5	45	3.8	26945	2.0	10700	1.8
	5.08	114	29.3	1653	64.7	154095	35.7	510	43.0	450291	33.8	233791	38.7
	5.09	12	3.1	40	1.6	12520	2.9	46	3.9	33767	2.5	24810	4.1
	5.11	4	1.0	-	-	4700	1:1	17	1.4	8600	9.0	4800	0.8
	5.13	7	1.8	•	•	6000	1.4	14	1.2	14595	1.1	7095	1.2
	5.14	11	2.8	78	3.1	21725	5.0	57	4.8	36538	2.7	29197	4.8
	5.15	36	9.3	13	0.5	23335	5.4	128	10.8	68271	5.1	48771	8.1
	5.17	7	1.8	1	0.3	2500	0.6	22	1.9	11535	0.9	8860	1.5
	5.19	3	0.8	•	•	1600	0.4	4	0.3	3110	0.2	2400	0.4
	5.2	5	1.3	•	•	1730	0.4	10	0.8	6545	0.5	4770	0.8
	9	3	0.8	13	0.5	1050	0.2	9	0.5	4200	0.3	3720	9.0
	8	2	0.5	-	- -	80	0.0	2	0.2	405	0.0	375	0.1
	10	29	15.2	•	-	10235	2.4	77	6.5	41148	3.1	33750	5.6
ALL		389	389 100.0	2555	100.01	431433	100.01	1187	100.0	1187 100.0 1331229	100.0	603968 100.0	100.0

COUNTY=NORFOLK

NORTHUMBERLAND AND DURHAM COUNTY

Administered together as one unit, the Northumberland and Durham geographic counties extended nearly 100 miles along the lakeshore midway between Toronto and Kingston. Settled relatively early, this large region had average rural population densities between 45 and 47 persons per square mile in 1871. It was well served by railways with the Grand Trunk line running along the northern shore of Lake Ontario to connect Montreal in the east with Toronto in the west and branch lines extending north into the hinterland of Peterborough and Victoria Counties. The average value of industrial production per capita (\$64.75) was lower than the mean for the province (\$74), and the scale of operation smaller with an average 3.4 employees per industrial establishment (4.4 per cent in all Ontario) and a mean value of output per establishment of \$4,153, compared with \$5,516 in the whole province.

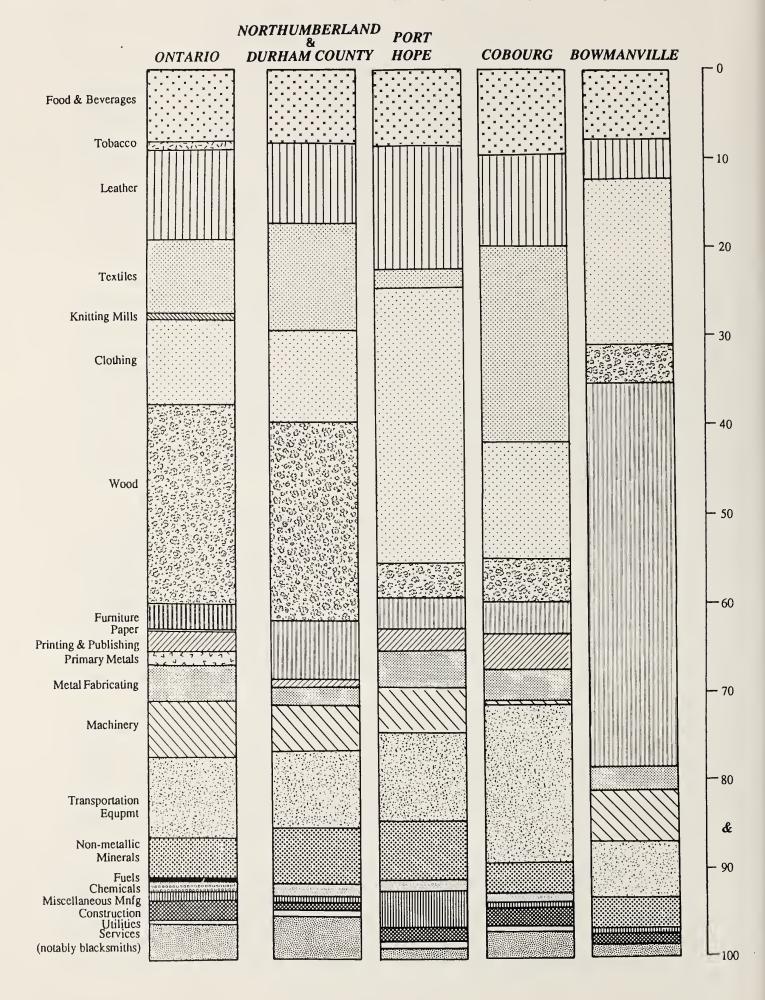
One in five of the total Northumberland and Durham population of 77,611 lived in the towns of Cobourg (4,442 people), Port Hope (5,114) or Bowmanville (3,034) or the villages of Brighton (1,357), Colborne (823) or Newcastle (1,109), which together produced nearly half of the county's total industrial output. Outside these incorporated urban centres, Hamilton and Clarke Townships had the most industry with activity also in larger unincorporated villages such as Campbellford (1,246 people), Grafton (600), Warkworth (800), Lifford (700), Millbrook (1,200) and Orono (1,000). Neither Cobourg nor Port Hope was highly industrialized, but Port Hope was somewhat specialized in clothing. The smaller communities were more distinctive, with more than one in six of Newcastle's 1,109 people working in industry (especially in the Massey Manufacturing Company) while Bowmanville was one of the most specialized industrial towns in Ontario.

When Northumberland and Durham County's industrial structure is compared with that of all Ontario, we see a well-balanced mix of industry types characteristic of the province as a whole. The county's furniture sector employed at least 2.5 times the provincial share while textiles and non-metallic mineral processing were also over-represented. The diagram overpage also illustrates the contrasting industrial structures of the three towns in relation to those of Northumberland and Durham County and the whole province. Some of the differences in industrial structure between the towns and whole county reflect urban-rural contrasts. Port Hope's relatively strong sectors were clothing, leather and miscellaneous manufactures, Cobourg's were woollen textiles and transportation equipment, and Bowmanville was clearly dominated by furniture.

Most of Northumberland and Durham County's industrial establishments were small craftshops, nearly 90 per cent of all workplaces reporting five or fewer employees. But three ranked among the top one per cent of Canada's industrial businesses. These were the sawmills of Campbell and of McDougall and Ludgate in Hamilton Township that between them employed 305 workers and produced \$245,000 worth of output, and the Bowmanville furniture factory in which 175 employees produced \$175,000 worth of output. In addition, four factories each employed more than 50 workers, and four others between 26 and 50 workers each.

In providing motive power for industrial activity, waterwheels were much more significant than steam engines or hand power in Northumberland and Durham County. Water power, harnessed on the many rivers and streams flowing over the edge of the shield, provided a great resource for local industry. Waterwheels supported 47 per cent of industrial output in the county, compared with a provincial mean of 29 per cent. The region ranked second to Ottawa-Carleton County in reported water-power capacity.

55E 52C 556 조 NORTHUMBERLAND AND DURHAM COUNTY S 55A 55B 55F 24C 7 54D HAMILTON TP BRIGHTON TP MONAGHAN S COLBORNE V BRIGHTON V COBOURG TN HALDIMAND SEYMOUR CRAMAHE ALNWICK MURRAY 24A PERCY **56A** 55G 56A 54C 54D 55A 55B 55C 55D 55E 55E 51A 51C 50D 510 NORTHUMBERLAND AND DURHAM BOWMANVILLE T 50B NEWCASTLE V PORT HOPE T CARTWRIGHT DARLINGTON MANVERS 50A CLARKE CAVAN HOPE CANIND71 50C 50A 50B 50C 50D 50E



	Y	OBSERV	Δ	FORCE	M	FIXCAP	<u>-</u>	TOTEMP	e.	SUMPROC	Soc	VADD	
		MOS	PERC- ENT	NOS	PERC- ENT	NOS	PERC- ENT	NOS	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC						_						
NORTHUMBERLAND-	1	e e	0.2		•	009	0.0	5	0.1	1775	0.0	775	0.0
DURHAM	5.01	122	10.1	2058	32.4	431290	23.5	303	7.4	1958014	39.0	354556	18.2
	5.04	152	12.6	61	1.0	75137	4.1	356	8.7	316765	6.3	160144	8.2
	5.05	06	7.4	480	7.6	180307	9.8	496	12.1	476220	9.5	201801	10.3
	5.07	88	7.3		•	132535	7.2	430	10.5	392640	7.8	144617	7.4
	5.08	252	20.8	3110	48.9	512950	27.9	923	22.6	681940	13.6	344502	17.7
	5.09	36	3.0	95	1.5	85465	4.7	256	6.3	199405	4.0	130014	6.7
	5.11	11	0.9	٠	-	25100	1.4	45	1.1	30900	9.0	19914	1.0
	5.12	1	0.1		•	009	0.0	0	0.0	•		•	•
	5.13	30	2.5	7	0.1	32380	1.8	81	2.0	65830	1.3	38464	2.0
	5.14	44	3.6	288	4.5	84890	4.6	200	4.9	182394	3.6	140904	7.2
	5.15	108	8.9	80	1.3	128180	7.0	370	9.1	375132	7.5	188008	9.6
	5.17	06	7.4	144	2.3	41771	2.3	272	6.7	116688	2.3	68585	3.5
	5.19	16	1.3	14	0.2	7310	0.4	51	1.2	45558	0.9	26205	1.3
	5.2	7	0.6	4	0.1	3650	0.2	29	0.7	22781	0.5	14056	0.7
	9	8	0.7	15	0.2	0009	0.3	33	0.8	36450	0.7	24790	1.3
	7	2	0.2	٠	•	26000	3.0	2	0.1	9500	0.5	0009	0.3
	8	7	0.6	•		1450	0.1	10	0.2	4250	0.1	3718	0.2
	10	143	11.8	٠	-	31215	1.7	219	5.4	109420	2.2	84413	4.3
ALL		1210	1210 100.0	6356	6356 100.0	1836830 100.0	100.00	4084	100.0	4084 100.0 5025662 100.0	100.0	1951466 100.0	100.0

------ COUNTY=NORTHUMBERLAND-DURHAM -----

ONTARIO COUNTY

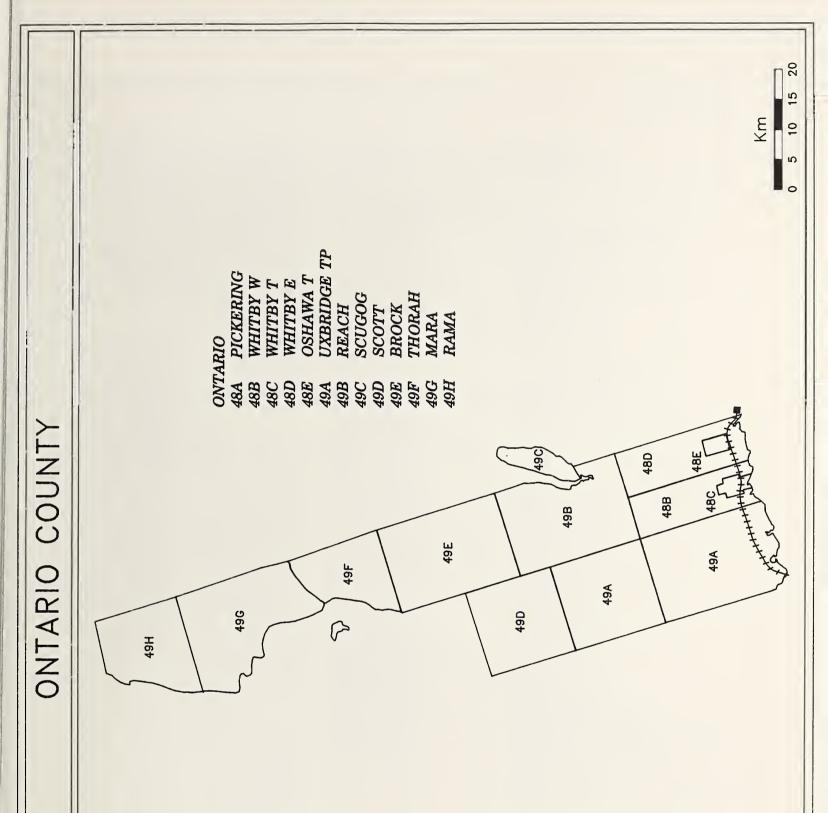
A long, narrow county, Ontario County comprised a cross-section of economic landscape from maturely developed farms and small towns and villages depicted on the cover of this report to the northern townships that were still part of the pioneer fringe. The Grand Trunk Railway, close to the lakeshore in the south, connected the towns of Whitby and Oshawa with Toronto in neighbouring York County. The county's average value of industrial production per capita (\$77.35) was a little higher than the mean for the province (\$74). The average number of employees per industrial establishment was close to the provincial mean, and the mean value of output per establishment was a little higher at \$5,354, compared with \$5,516 in the whole province.

Of its total population of 45,890, nearly 13 per cent lived in the towns of Whitby (2,732) and Oshawa (3,185) which together produced nearly 38 per cent of the county's industrial output. Whitby, a typical county town, was clearly less industrialized than the mean for all urban centres in the province. Oshawa was a remarkable example of a small town with a large proportion of its population (23 per cent) employed in industry, high degree of specialization in particular industry types, and substantial value of industrial of output. Rural industry was more strongly represented in Whitby East, Whitby West and Reach Townships, and in larger unincorporated villages such as Beaverton (about 1,200 people), Brooklin (650), Cannington (800), Port Perry (1,500), Prince Albert (600) and Uxbridge (1,000).

When Ontario County's industrial structure is compared with that of the province as a whole, we find that several sectors were distinctively stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). Furniture and machinery were sectors which in Ontario County employed at least 2.5 times their provincial share while leather, wood products. metal fabricating, non-metallic minerals and blacksmiths were recorded in Ontario County and the province in roughly similar proportions. The diagram also illustrates the contrasting industrial structures of Whitby and Oshawa in relation to those of Ontario County and the whole province. Some of the differences in industrial structure between the towns and whole county reflect urban-rural contrasts. Textile mills (and other cloth production) were usually located in rural areas and small villages, while the making of clothing was concentrated in urban places. Construction activity was also more intensive in the larger towns and cities, while blacksmiths were more typical in the countryside than in the towns. Whitby's strongest sectors were leather, clothing, printing and publishing, machinery, transportation equipment, miscellaneous manufactures and construction. Oshawa was clearly dominated by its furniture and machinery industries.

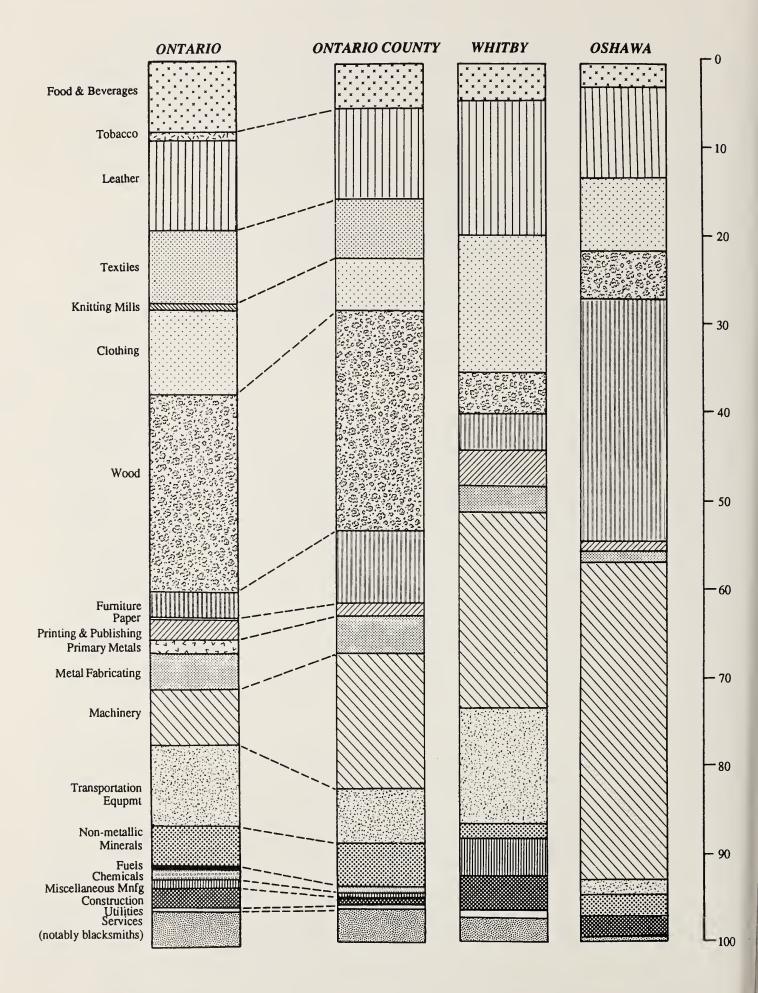
Most of Ontario County's industrial establishments were small craftshops, more than 85 per cent of all workplaces reporting five or fewer employees. But three factories ranked among the top one per cent of Canada's industrial businesses. They were Joseph Hall's Oshawa plant that employed 266 workers manufacturing \$300,000 worth of engines and farm machinery, William H. Gibbs's Oshawa furniture factory, and Whiting and Cowan's agricultural implement factory. Three rural sawmills each employed more than 50 workers, and five other establishments reported between 26 and 50 employees each.

In providing motive power, waterwheels were relatively more significant than steam engines or hand power in Ontario County, supporting 46 per cent of industrial output (compared with a provincial mean of 29 per cent).





CANIND71



		OBSERV	- -	FORCE	- -	FIACAP		TOTPUE	!	CONTENCO	2	VADD	
		SUM	PERC-	SUM	PERC- ENT	NOS	PERC- ENT	SUM	PERC- ENT	SUM	PERC-	SUM	PERC- ENT
COUNTY	SEC												
ONTARIO	5.01	49	7.4	1200	32.0	321492	24.1	143	5.1	1246162	35.1	203056	12.9
	5.04	107	16.1	104	2.8	83175	6.2	292	10.4	345145	9.7	155907	6.6
	5.05	53	8.0	235	6.3	110932	8.3	185	9.9	213689	0.9	112206	7.1
	5.07	45	6.8		-	19957	1.5	168	0.9	125375	3.5	55945	3.6
	5.08	132	19.9	1837	49.0	276813	20.8	700	25.0	478748	13.5	272789	17.3
	5.09	16	2.4	80	2.1	81780	6.1	233	8.3	207300	5.8	97045	6.2
	5.11	6	1.4		-	27100	2.0	36	1.3	25610	0.7	18750	1.2
	5.13	22	3.3	91	2.4	58720	4.4	121	4.3	145308	4.1	89478	5.7
	5.14	30	4.5	150	4.0	259100	19.5	430	15.3	465480	13.1	366580	23.3
	5.15	62	9.4	1/	0.2	44695	3.4	178	6.3	123288	3.5	86303	5.5
	5.17	54	8.1	14	0.4	10655	0.8	148	5.3	29915	0.8	26425	1.7
	5.19	2	0.8	-	-	1285	0.1	11	4.0	10404	0.3	5524	0.4
	5.2	1	0.2	-	-	1000	0.5	11	0.4	10200	0.3	7440	0.5
	9	4	0.6	31	0.8	9300	0.7	31	1.1	53970	1.5	27810	1.8
	8	4	0.6	-	-	2625	0.2	4	0.1	4250	0.1	4050	0.3
	10	70	10.6	•	-	16810	1.3	114	4.1	64974	1.8	46247	2.9
ALL		663	100.00	3748	100.0	1331439	100.00	2805	100.0	3549818	100.0	1575555	100.0

COUNTY-ONTARIO ---

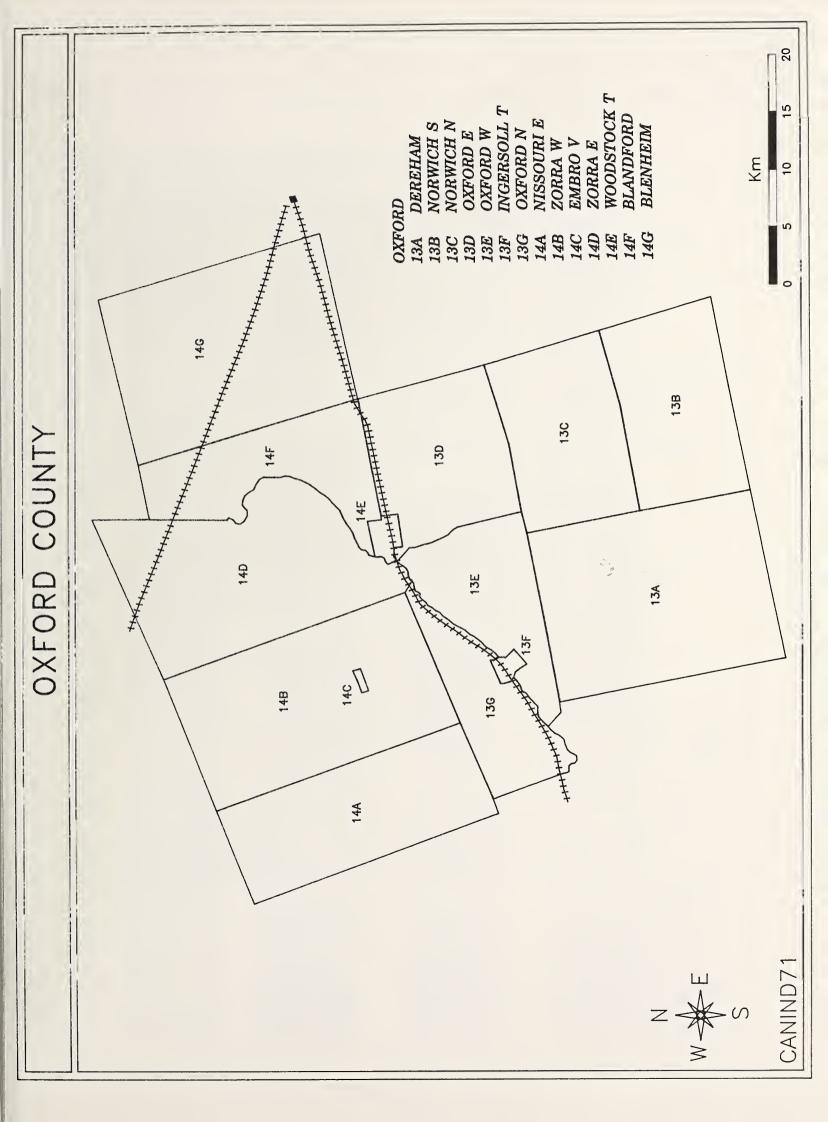
Part of the earliest inland settlement in Upper Canada in the 1790s, Oxford County was part of the maturely developed zone of the province by 1871, more densely populated in its rural areas than most of southern Ontario. The county's mean value of industrial production per capita (\$69.37) was close to the mean for Ontario (\$74.00), the average number of employees per industrial establishment was 5.4 in Oxford compared with 4.4 in Ontario, and the mean value of output per establishment was a little smaller -- \$4,957, compared with \$5,516. Oxford's level and variety of industrial activity reflected its agricultural productivity and the early railway connections provided by two railway lines since the mid-1850s, especially the Great Western Railway linking it with Hamilton in the east and London in the west.

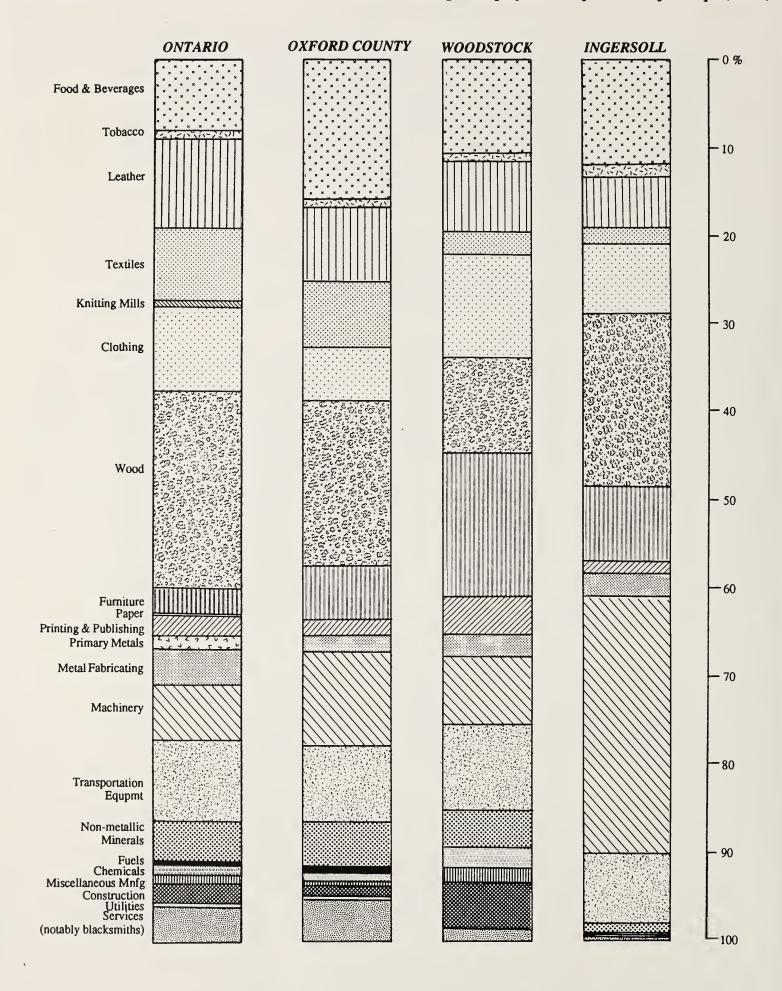
Eighteen per cent of the county's 48,237 people lived in the towns of Ingersoll (4,022) or Woodstock (3,982) or the village of Embro (484). Workers in these three centres produced 46 per cent of the county's total value of industrial output. In addition, there were several unincorporated villages of at least 500 population -- Beachville (700), Drumbo (600), Norwich (900), Princeton (600), and Tilsonburg (1,000).

When Oxford County's industrial structure is compared with that of Ontario as a whole, we find that several sectors were distinctively stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). Food and beverages (including cheese factories), furniture, and machinery were sectors which in Oxford County employed at least 1.5 times their share in Ontario generally. The diagram also illustrates the industrial structures of Woodstock and Ingersoll in relation to those of Oxford County and the whole province. Compared with other towns and cities of Ontario, Ingersoll combined above-average industrial activity with a fairly specialized industrial structure. As county town, Woodstock was less industrialized and more diversified. Some of the differences in industrial structure between the towns and whole county reflect urban-rural contrasts. Textile mills (and other cloth production) were usually located in rural areas and small villages, while the making of clothing was concentrated in urban places. Construction activity was also more intensive in the larger towns and cities, while blacksmiths were more typical in the countryside than in the towns. The most distinctive industry in Woodstock was furniture, while nearly 30 per cent of Ingersoll's workers were in machinery factories and shops.

Most of Oxford County's industrial establishments were small craftshops—blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. More than 83 per cent of the county's workplaces reported five or fewer employees, but this proportion was slightly lower in Oxford County than in Ontario generally. Steam power was most significant in Oxford County, supporting 48 per cent of industrial output, compared with only 36 per cent across Ontario.

Oxford County had two of Canada's leading factories which ranked in the top one per cent of all industrial units in the four measures of employment, value of output, fixed capital investment and value added. Both manufacturers of agricultural machinery and engines in Ingersoll, these were the Noxon Brothers' foundry which employed 103 workers, and Eastwood and Co. with 70 workers. Three smaller factories, employing between 26 and 50 workers were recorded in Ingersoll, as well as four in Woodstock: these included planing mills (making sashes, windows and doors for the building trades), furniture factories and foundries.





		OBSERV	در در	FORCE	8	FIXCAP	2	TOTEMP	d)	SUMPROC	၁၀	VADD	0
		SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	NOS	PERC- BNT
COUNTY	SBC												
OXFORD	5.01	147	21.8	1001	35.0	355067	33.7	419	15.6	1434065	42.9	315247	22.1
	5.02	4	9.0	•	•	5700	0.5	13	0.5	8498	0.3	5687	0.4
	5.04	95	14.1	53	1.7	68850	6.5	230	8.6	194707	5.8	98362	6.9
	5.05	24	3.6	246	8.1	68178	6.5	199	7.4	269238	8.0	174969	12.2
	5.06	1	0.1	•	-	100	0.0	6	0.1	460	0.0	310	0.0
	5.07	42	6.2		•	29450	2.8	164	6.1	138586	4.1	55584	3.9
	5.08	82	12.1	1221	40.3	162235	15.4	504	18.8	446717	13.3	234735	16.4
	5.09	22	3.3	161	5.3	50795	4.8	167	6.2	111129	3.3	68604	4.8
	5.11	8	1.2	9	0.2	28100	2.7	39	1.5	20450	9.0	14340	1.0
	5.13	28	4.1	3	0.1	18710	1.8	55	2.0	56012	1.7	29899	2.1
	5.14	32	4.7	201	9.9	145415	13.8	293	10.9	285379	8.5	168647	11.8
	5.15	55	8.1	9	0.2	47070	4.5	230	8.6	134981	4.0	90185	6.3
	5.17	29	4.3	16	0.5	17680	1.7	140	5.2	55225	1.7	40354	2.8
	5.18	3	0.4	48	1.6	23000	2.2	16	9.0	66940	2.0	50652	3.5
	5.19	12	1.8	•	•	5150	0.5	35	1.3	17973	0.5	9369	0.7
	5.2	9	6.0		•	2320	0.2	13	0.5	9318	0.3	5970	0.4
	9	9	0.9	8	0.3	6100	9.0	27	1.0	29440	6.0	13020	0.9
	8	e	0.4	· ·	-	200	0.0	4	0.1	1440	0.0	1180	0.1
	10	94	11.3	•	•	18490	1.8	133	5.0	62639	2.0	51474	3.6
ALL		675 100	100.01	3030	100.0	1052910	100.00	2684	100.0	3346197	100.0	1428588	100.0

----- COUNTY-OXFORD ----

PEEL COUNTY

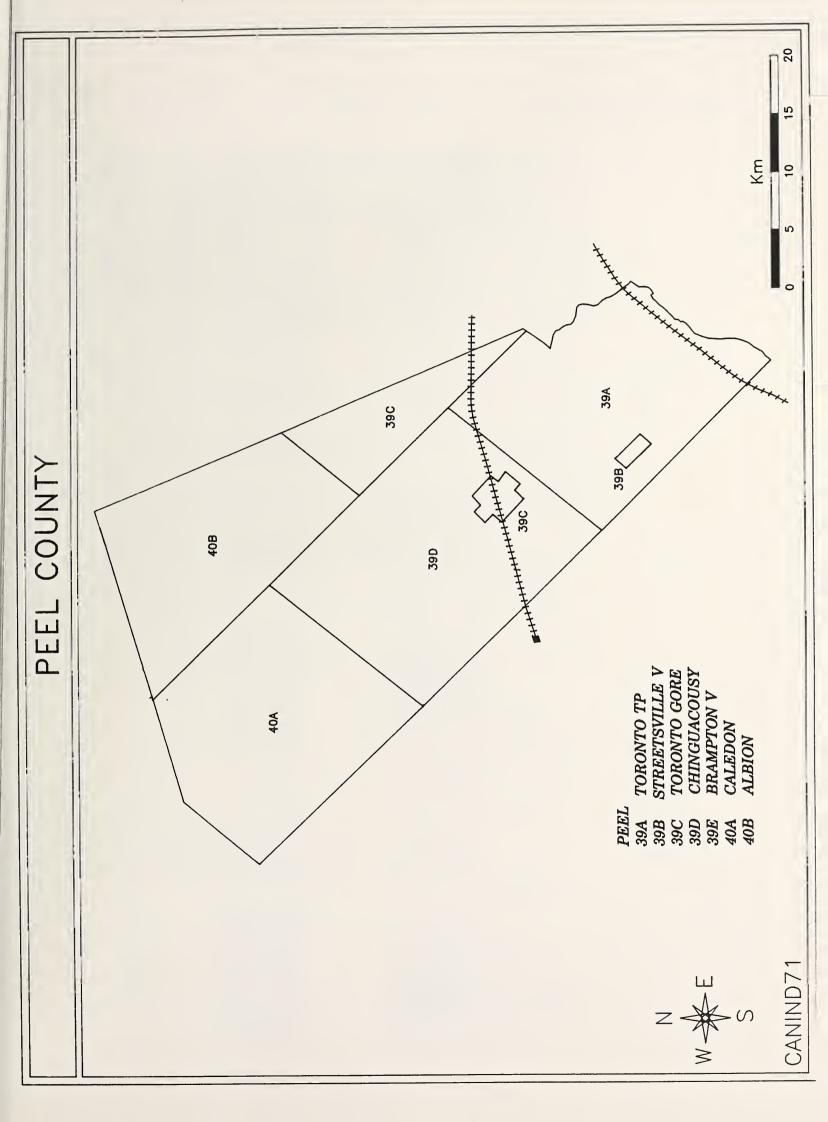
Bordering York County to the west, Peel County formed part of the maturely developed zone of the province by 1871, with above-average rural population densities which had peaked in the 1860s. Its small territory combined well-established farms, several towns and villages and two major eastwest railway lines. In its level of urban-industrial activity, Peel was broadly similar to rural southern Ontario. The mean value of industrial production per capita (\$63.65) was below the Ontario mean of \$74. The scale of industrial activity was also a little smaller, with an average 3.2 employees per industrial establishment (4.4 in Ontario), and a mean value of output of \$4,664 compared with an Ontario mean of \$5,516.

When Peel County's industrial structure is compared with that of Ontario as a whole, we find a mix that was fairly typical of rural areas based on agriculture, but with several sectors distinctively stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). Food and beverages, textile and knitting mills, machinery and blacksmiths were sectors which in Peel County employed at least 1.5 times their share across Ontario. Clothing, wood processing, primary metals and metal fabricating were notably under-represented.

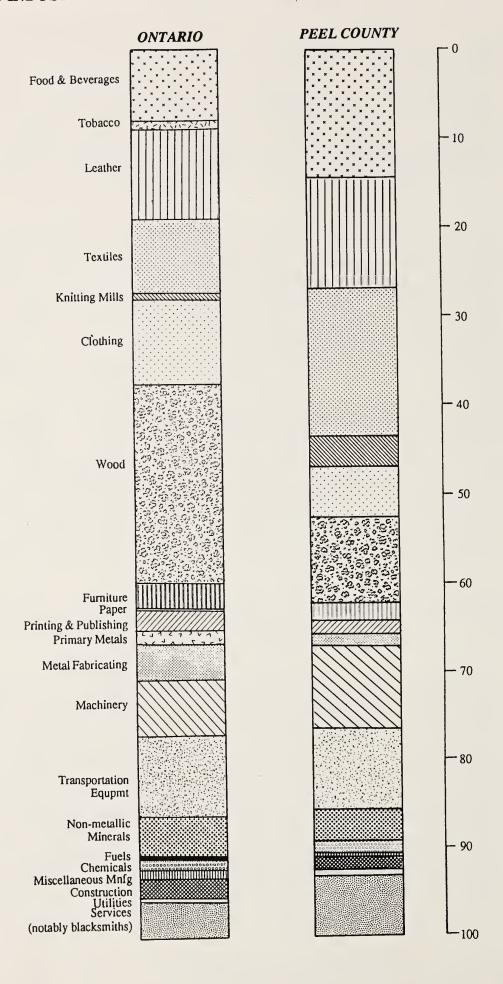
One in ten of the county's 26,011 people were counted in the two incorporated villages of Brampton (2,090) or Streetsville (617). Industrial establishments in these two urban centres together produced over one quarter of the value of industrial output in the county. The only unincorporated village with over 500 population was Bolton (1,000 population). When compared with other urban centres in Ontario, Brampton combined below-average employment in industry with a notable specialization in the manufacture of machinery. Toronto Township (now Mississauga) had the most impressive industrial statistics in 1871, with three in ten of the county's industrial workers and one third of the total value of output.

Water power was exceptionally significant in Peel County, waterwheels especially on the Credit River powering 65 per cent of industrial output. The mean proportion across Ontario was only 29 per cent.

Most of Peel County's industrial units were small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. More than 83 per cent of Peel County's industrial establishments reported five or fewer employees, close to the same proportion as in Ontario generally. Only two large factories were recorded in 1871, both of them ranking among the top one per cent of Canada's industrial businesses. They were Haggert Brothers' Brampton factory in which 93 men made over \$100,000 worth of agricultural machinery and stoves and the Barber Brothers' textile mill which employed 129 workers in the manufacture of \$175,000 worth of woollen cloth in Toronto Township outside Streetsville. Three other powered workplaces in Toronto Township employed between 26 and 37 workers -- Edwin Turner's knitting factory, Solomon White's winery, and Gooderham and Worts' flour mill (the last with output worth more than \$250,000).



COMPARATIVE INDUSTRIAL STRUCTURES: Percentages Employed in Major Industry Groups (SECs)



		OBSERV	>	FORCE	i pa	FIXCAP	a	TOTEMP	e,	SUMPROC	00	VADD	
		SUM	PERC-	SUM	PERC- ENT	SUM	PERC-	SUM	PERC-	SUM	PERC- ENT	SUM	PERC-
COUNTY	SEC						 				 		
PEEL	5.01	33	6.9	612	39.2	242100	39.6	155	13.5	833610	50.3	178070	28.5
	5.04	65	18,3	37	2.4	30495	5.0	145	12.6	120671	7.3	57494	9.2
	5.05	26	7.3	267	17.1	165533	27.1	196	17.0	221739	13.4	101097	16.2
	5.06		0.3	20	1.3	11000	1.8	37	3.2	25000	1.5	11000	1.8
	5.07	22	6.2			6240	1.0	68	5.9	50690	3.1	20070	3.2
	5.08	45	12.7	557	35.7	47534	7.8	114	9.9	111405	6.7	77231	12.4
	5.09	6	2.5	16	0.1	2000	0.8	22	1.9	15385	6.0	10940	1.8
	5.11	4	T		•	19500	3.2	18	1.6	8600	0.5	7175	1.1
	5.13	7	2.0	10	0.6	3200	0.5	11	1.0	11350	0.7	5718	0.9
	5.14	6	2.5	30	1.9	36150	5.9	111	9.6	115010	6.9	60965	9.8
	5.15	39	11.0	7	0.4	19475	3.2	108	9.6	64214	3.9	43449	7.0
	5.17	16	4.5	9	0.4	5050	0.8	41	3.6	16033	1.0	9284	1.5
	5.19	2	1.4	•	•	2250	0.4	12	1.0	4739	0.3	2669	0.4
	5.2	2	9.0	•	•	450	0.1	2	0.2	2100	0.1	1775	0.3
	9	4	1.1	•	•	540	0.1	10	6.0	4790	0.3	2748	0.4
	80	9,	0.8	•	•	750	0.1	₹	0.3	1530	0.1	1180	0.2
	10	65	18.3	•	•	15930	2.6	86	8	48889	3.0	33863	5.4
ALL		355	100.01	1562	1562 100.0	611197 100.0	100.001	1152	100.0	1152 100.0 1655755 100.0	100.0	624728 100.0	100.0

COUNTY-PERL ----

PERTH COUNTY

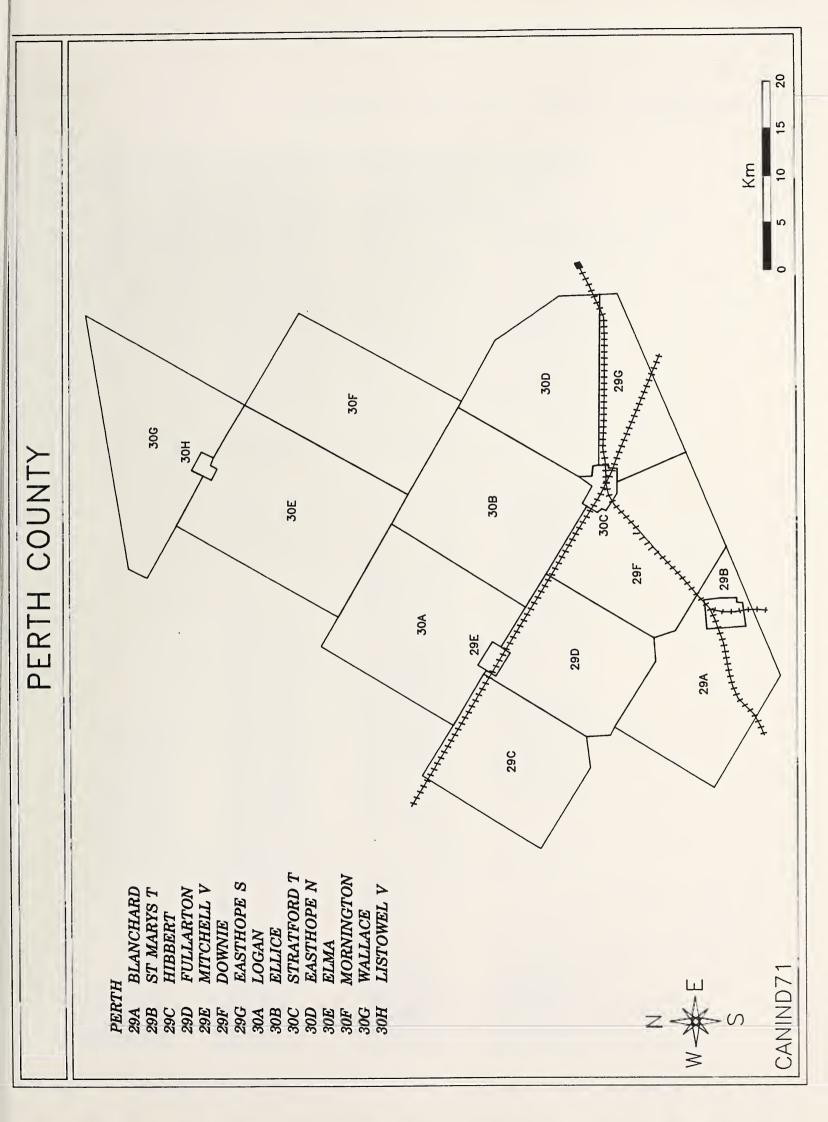
Consisting of the narrower, eastern portion of the Huron Tract opened for settlement in the 1820s and 1830s, Perth County was quite maturely developed by 1871. Its rural population, which peaked at this time, was distributed at an average density of 43 persons per square mile, similar to Elgin, Norfolk or Wellington Counties. While mainly agricultural, Perth County also had several significant urban centres and a fair level of industrial activity. The county's mean value of industrial production per capita (\$55.30) was considerably lower than the mean for Ontario (\$74.00), but the average number of workers and average output in each industrial unit were about the same. Perth County was among the earliest parts of Ontario to be traversed by a railway - the Brantford, Buffalo and Goderich Railway (part of the Grand Trunk system by 1871) and the Grand Trunk Railway itself from the mid-1850s.

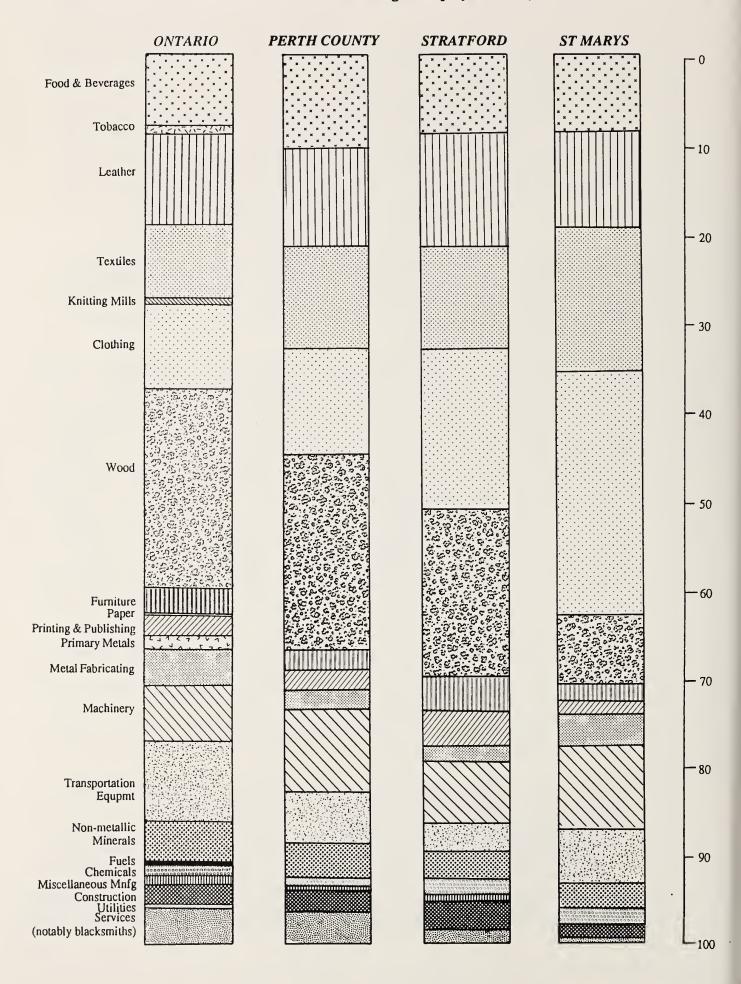
Twenty-two per cent of the county's 46,536 people lived in the towns of Stratford (4,313) or St Marys (3,120) or the villages of Mitchell (1,802) or Listowel (976). Workers in these three centres produced two-thirds of the county's total value of industrial output. In addition, there were several unincorporated villages, of which the only one with over 500 population was Carronbrook, later renamed Dublin (1,000).

When Perth County's industrial structure is compared with that of the whole province, we find that a mix generally typical of rural farming areas with several sectors distinctively stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). Textiles and machinery were the two sectors which in Perth County employed at least 1.5 times their share in Ontario as a whole, while food and beverages, leather and clothing were more slightly over-represented. The diagram also illustrates the industrial structures of Stratford and St Marys in relation to those of Perth County and Ontario. Neither town had above-average industrial employment, but St Marys clearly specialized in clothing and, to a smaller degree, in textiles and machinery. As county town, Stratford was less industrialized and more diversified, but with some strength in clothing and in printing and publishing. The villages of Mitchell and Listowel both had above-average shares of their populations employed in industry and had measurable specializations in particular sectors, Mitchell in agricultural implements and Listowel in flax- milling.

Most of Perth County's industrial establishments were small craftshops -blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Nearly four in every five of the county's workplaces reported five or fewer employees, but this proportion was somewhat lower in Perth County than in Ontario generally. Steam and hand power were more significant in Perth County, each supporting 40 per cent of industrial output, compared with only 36 and 31 per cent respectively in Ontario as a whole.

Perth County's largest industrial enterprise ranked among the top one per cent of all in Canada in the three measures of employment, value of output and value added. The Thompson and Williams factory in Mitchell employed 106 workers making agricultural machinery and engines worth \$150,000 in 1871; the business would be bonused away to Stratford in the mid-1870s. In addition, seven factories or manufactories employed between 26 and 50 workers -- three in St Marys and four in Stratford in clothing, foundries or the processing of wood or flax. Reflecting the local strength in textiles and clothing, Perth County reported somewhat more women and girls working in industrial establishments than the mean for Ontario.





		OBSERV		FORCE		FIXCAP	<u>—</u> -	TOTEMP		SUMPROC	သူ	VADD	
		SUM I	PERC-	SUM	PERC- ENT	MDS	PERC- ENT	SUM	PERC- ENT	MOS	PERC- ENT	MUS	PERC- ENT
COUNTY	SEC												
PERTH	5.01	53	10.3	830	36.3	203100	23.0	211	9.7	941073	36.6	185834	17.6
	5.04	89	17.3	52	2.3	80900	9.2	236	10.9	267098	10.4	124490	11.8
	5.05	42	8.2	169	7.4	78905	8.9	255	11.8	139454	5.4	52697	5.0
	5.07	48	9.3	·	·	42370	4.8	255	11.8	214297	8.3	98147	9.3
	5.08	167	15.3	1035	45.3	250275	28.3	484	22.3	384644	14.9	190453	18.1
	5.09	12	2.3	18	0.8	20040	2.3	51	2.4	41440	1.6	24865	2.4
	5.11	10	1.9	-	·	34400	3.9	46	2.1	28800	1.1	18100	1.7
	5.12	1	0.2	20	0.9	4500	0.5	6	0.4	٠	•	٠	•
	5.13	15	2.9	12	0.5	21900	2.5	43	2.0	56512	2.2	35362	3.4
	5.14	20	3.9	120	5.3	64560	7.3	209	9.6	239258	9.3	163343	15.5
	5.15	37	7.2	14	0.6	39442	4.5	120	5.5	86145	3.3	56083	5.3
	5.17	22	4.3	14	0.6	5770	0.7	85	3.9	24727	1.0	21122	2.0
	5.19	12	2.3	T	0.0	11355	1.3	26	1.2	49660	1.9	28850	2.7
	5.2	2	0.4	•	•	1200	0.1	5	0.2	5600	0.2	2000	0.2
	9	16	3.1	•	•	6330	0.7	53	2.4	49029	1.9	20907	2.0
	10	57	11.1	•	•	17825	2.0	81	3.7	45720	1.8	32529	3.1
ALL		515 100.0	00.00	2285 100.0	100.00	882872 100.0	100.001	2169	100.0	2573457	100.0	2169 100.0 2573457 100.0 1054782 100.0	100.0

-- COUNTY-PERTH ---

With many of its townships still undergoing settlement, Peterborough County was part of Ontario's pioneer fringe in 1871 and reached its maximum rural population in 1881. It included much of what would later become the Provisional County of Haliburton. The county's average rural population density of under 15 persons per square mile was only one quarter that of the most maturely settled townships of southern Ontario. Only the southwestern corner of the county was served with railways that linked the town of Peterborough to Cobourg and Port Hope on the trunk lines along the shore of Lake Ontario.

Peterborough County was generally less industrialized than other parts of the province. The mean value of industrial production per capita (\$32.52) was significantly lower than the mean for Ontario (\$74.00). But the average number of employees per industrial establishment was higher in Peterborough County, at 4.9 compared with 4.4 across Ontario, and the mean value of output per establishment was only slightly lower -- \$5,118 compared with \$5,516.

More than one of five of Peterborough County's total population of 27,167 lived in the county town of Peterborough (4,611) or the neighbouring village of Ashburnham (1,197). These two urban centres (mainly Peterborough in which 760 workers or 16.5 of the town population worked in mills, factories and workshops) accounted for just under half the total industrial output of the county. Significant industrial activity was also reported in Smith and Asphodel Townships, the latter including the not yet incorporated villages of Hastings (900 people) and Norwood (750).

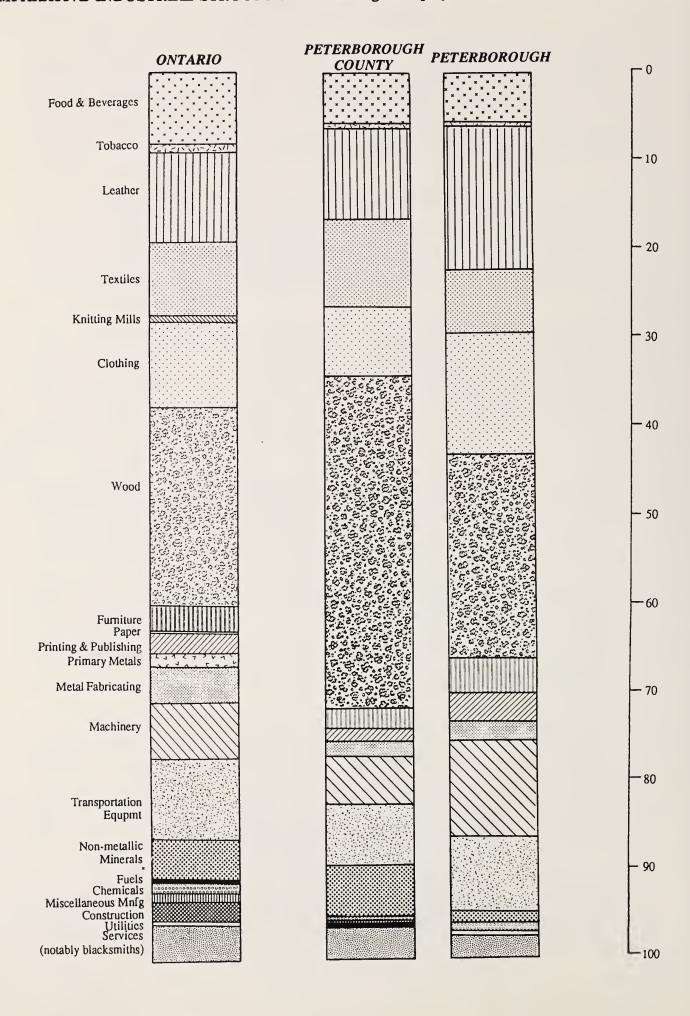
When Peterborough County's industrial structure is compared with that of Ontario as a whole, the mix of industry types is found to be characteristic of rural areas on the margins of settlement. The diagram overpage has been designed to show these as clearly as possible, using major industry groups (SECs in the database) and permitting comparisons of the town of Peterborough with the county and the province. Wood processing, the largest industrial sector in Peterborough with nearly twice the average share across Ontario, was located outside urban areas and often on the settlement frontier. Textile mills, often powered by waterwheels, were usually located in rural areas and small villages while clothing shops were typically urban, as were metal and machinery industries. Non-metallic minerals (such as lime kilns, and the making of bricks, tiles and pottery) were a little more important in the county than in the as a whole province. In the town of Peterborough, the leather, clothing and machinery sectors employed at least 1.5 times their mean shares in Ontario generally.

Most of Peterborough County's industrial establishments were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Eighty-three per cent of workplaces in the county had five or fewer workers, but this was a smaller proportion than in Ontario generally. None of the county's establishments ranked among the top one per cent of Canadian industrial businesses, but five mills employed more than 50 workers each, and three smaller workplaces each reported between 26 and 50 employees.

In providing motive power for industrial activity, waterwheels were much more significant than steam engines or hand power in Peterborough County. Water power, harnessed on the many rivers and streams flowing over the edge of the shield, provided a great resource for local industry. Waterwheels supported 58 per cent of industrial output in the county, compared with a provincial mean of 29 per cent.

10 15 20 X E 2 **57F** PETERBOROUGH COUNTY 57D **57E 58C** 57A 57C 57B 56D A 586 58A 58B 58D 58E 58F PETERBOROUGH ASHBURNHAM V 56B MONAGHAN N STANHOPE/... GUILFORD/... ENNISMORE SNOWDEN/... PETERBOROUGH CHANDOS/... BELMONT/... OTONABEE ASPHODEL GALWAY/... DUMMER MINDEN HARVEY DOURO SMITH 56E 57A 57B 57C 57D 57E 57F 58A 58B 58C28D58E 26D

CANIND71



		OBSERV	Δ.	FORCE	M	FIXCAP	9	TOTEMP	e	SUMPROC	၁ဝ	VADD	
		SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC-	SUM	PERC- ENT
COUNTY	SEC												
PETERBOROUGH	5.01	30	8.2	260	23.8	146130	22.4	87	4.9	452533	24.0	73438	8.9
	5.02	1	0.3		•	1000	0.2	9	0.3	2000	0.3	3400	0.4
	5.04	53	14.4	54	2.3	68722	10.5	187	10.5	178245	9.5	82685	10.0
	5.05	39	10.6	238	10.1	29262	4.5	179	10.0	190810	10.1	96908	9.8
	5.07	26	7.1			25325	3.9	138	7.7	115926	6.2	46326	5.6
	5.08	72	19.6	1331	56.5	217679	33,3	089	38.2	562172	29.8	256559	31.1
	5.09	14	ر ش	33	4.4	17800	2.7	44	2.5	26839	7.4	19534	2.4
	5.11	4	1.1	7	0.3	22700	3.5	27	1.5	58500	3.1	53675	6.5
	5.13	11	3.0	٠	•	8400	1.3	29	1.6	26850	1.4	14576	1.8
	5.14	11	3.0	89	3.8	52825	8.1	96	5.4	107278	5.7	78765	9.5
	5.15	25	6.8	39	1.7	31225	4.8	120	6.7	71831	3.8	52284	6.3
	5.17	31	8.4	6	0.1	5936	0.9	91	5.1	20710	1.1	15044	1.8
	5.19	4	1.1	•	•	3000	0.5	12	0.7	9785	0.5	5225	0.6
	5.2	rel	0.3	•	•	200	0.0	Ħ	0.1	400	0.0	300	0.0
	7	rel	0.3	•		2000	8.0	F1	0.1	4800	0.3	3100	0.4
	10	45	12.2	٠	•	17949	2.7	84	4.7	51750	2.7	39831	4.8
ALL		368	368 100.0	2354	100.0	653153	100.00	1782		100.0 1883429 100.0	100.0	825438	100.0

-- COUNTY-PRIERBOROUGH ---

PRESCOTT AND RUSSELL COUNTY

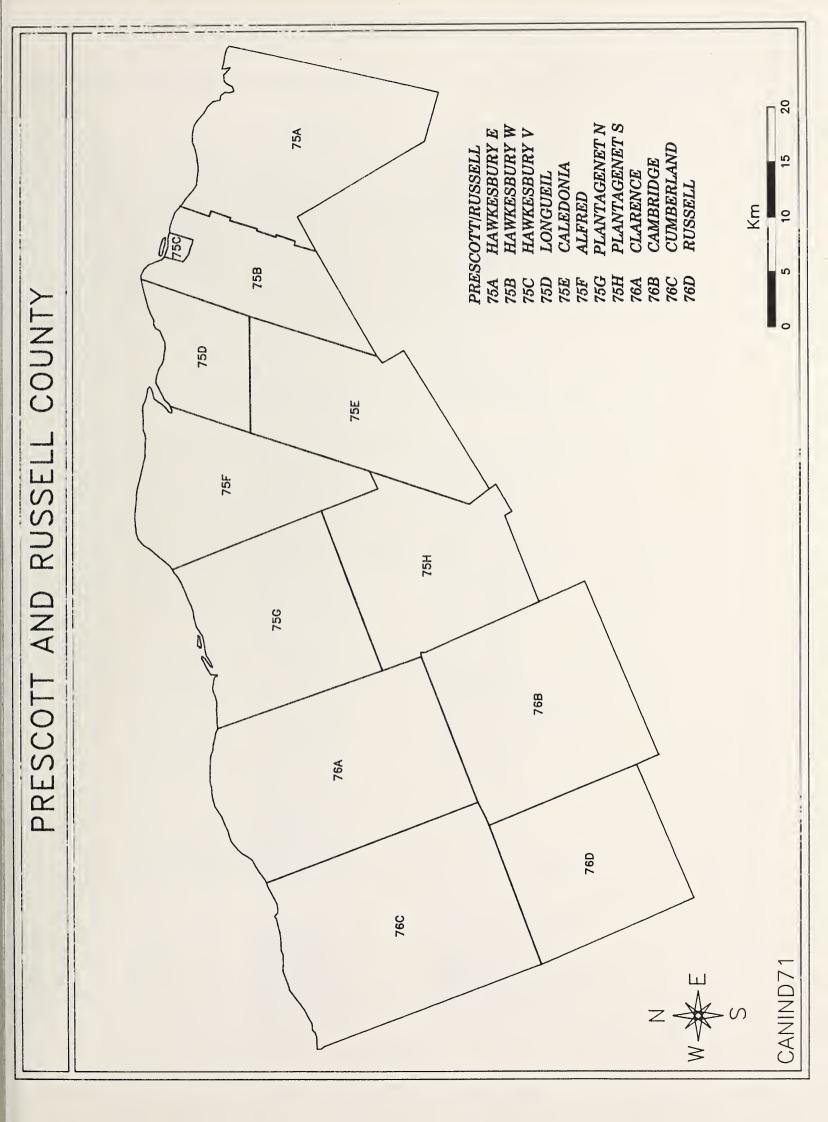
Administered together as one unit, the Prescott and Russell geographic counties extended nearly 60 miles along the south shore of lower Ottawa River to the boundary with the province of Quebec. Prescott and Russell County was one of only five counties in southern Ontario with no railway line in 1871. Rural densities of the mainly French-speaking people ranged between 21 and 34 persons per square mile and would not peak until the end of the century. The county's average value of industrial production per capita (\$48) was much lower than the mean for the province (\$74). The scale of operation was somewhat smaller, with an average 3.3 employees per industrial establishment (4.4 per cent in Ontario) and a mean value of output per establishment of \$4,230 (\$5,516 in Ontario).

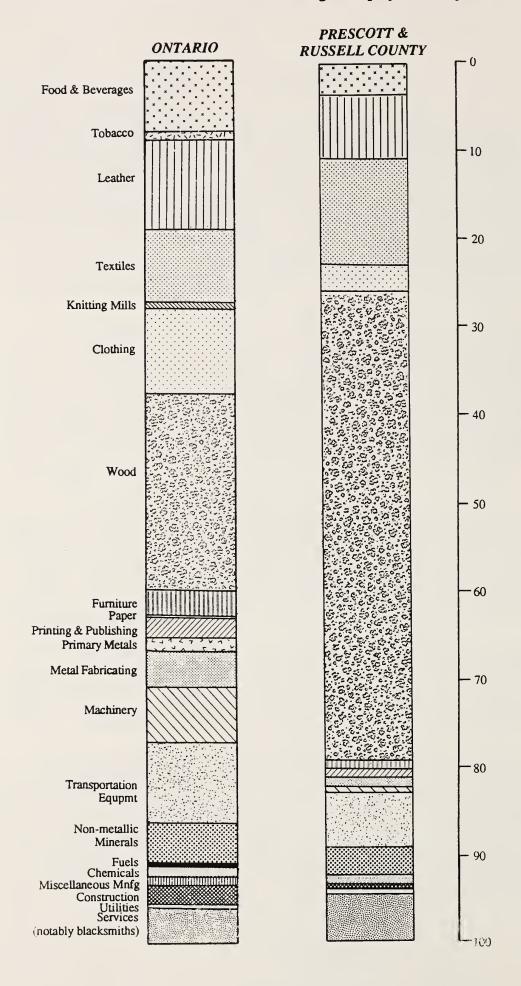
Only one in fifteen of the total county population of 26,343 lived in the sole incorporated village of Hawkesbury (1,671 people) which produced well over half the county's total industrial output. A mill town completely dominated by Hamilton Brothers interests, and well located to process logs floated down the Ottawa River and its tributaries, Hawkesbury was both highly industrialized and specialized. Eighteen per cent of its people were engaged in industry, and two in every three industrial workers were employed in the huge Hamilton sawmill, the largest in Ontario with 168 workers producing \$540,000 worth of wood products.

When the industrial structure of Prescott and Russell County is compared with that of all Ontario, we find a wood-processing sector nearly three times the relative size of that in Ontario as a whole. The only other sectors in Prescott and Russell County with at least 1.5 times their provincial shares were textiles and rural services (mainly blacksmiths). All other sectors, from food and beverages, through clothing to metal-working and the manufacture of machinery were correspondingly small.

Most of the industrial establishments in Prescott and Russell were small craftshops, over 91 per cent of all workplaces reporting five or fewer employees. Only the Hamilton mill at Hawkesbury ranked among the top one per cent of Canada's industrial businesses, but another sawmill also reported over 50 employees. Three rural sawmills each employed between 26 and 50 workers.

In providing motive power for industrial activity, waterwheels were much more significant than steam engines or hand power in Prescott and Russell County. Water power supported 68 per cent of industrial output in the county, compared with a provincial mean of 29 per cent. Though a relatively small county, Prescott and Russell County ranked sixth in Ontario for water-power units developed for industrial use, behind Ottawa-Carleton, Northumberland and Durham, Leeds and Grenville, York, and Simcoe Counties. The Hamilton mill at Hawkesbury reported using waterwheels with a capacity of 1,500 horse-power.





		OBSERV	A:	FORCE		FIXCAP	- a	TOTEMP		SUMPROC	Soc	VADD	
		SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC	!											
PRESCOTT	[5.01	19	6.4	458	12.7	65613	18.1	36	3.7	262904	20.8	57401	13.3
KOSSKEL	5.04	39	13.0	-	-	11827	3.3	107	7.1	55667	4.4	29445	6.8
	5.05	91	30.4	167	2.2	21467	5.9	120	12.2	68751	5.4	33030	7.6
	5.07	14	4.7	-	•	2660	0.7	29	2.9	14400	1.1	5528	1.3
	5.08	43	14.4	3066	84.8	227038	62.8	528	53.6	760569	60.1	238853	55.3
	5.09	9	2.0		0.0	1350	0.4	6	0.9	4150	0.3	3330	0.8
	5.11	2	0.7	-	-	4000	1.1	8	0.8	3500	0.3	2660	9.0
	5.13	5	1.7	8	0.2	2950	0.8	17	1.7	11880	6.0	6530	1.5
	5.14	2	1.7	-	•	1150	0.3	10	1.0	11300	6.0	5705	1.3
	5.15	15	5.0	·	-	7170	2.0	54	5.5	29210	2.3	18088	4.2
	5.17	13	4.3	5	0.1	3520	1.0	30	3.0	4321	0.3	4039	6.0
	5.19	4	1.3	-	-	3450	1.0	12	1.2	9430	0.7	4806	1.1
	9	1	0.3	•	•	20	0.0	1	0.1	100	0.0	88	0.0
	8	2	0.7	·	-	009	0.2	5	0.5	2100	0.2	1680	0.4
	10	40	13.4	•	-	8880	2.5	56	5.7	26365	2.1	21039	4.9
ALL		299	100.00	3617	3617 100.0	361695 100.0	100.001	985	100.0	985 100.0 1264647 100.0	100.0	43222 100.0	100.0

COUNTY-PRESCOTT-RUSSELL ---

Settled since the arrival of Loyalists in the 1780s, Prince Edward County reached its peak rural population density of 45 persons per square mile in the early 1860s. Essentially an island close to the north shore of Lake Ontario without any railway services by 1871, the county had been little affected by industrialization on any scale.

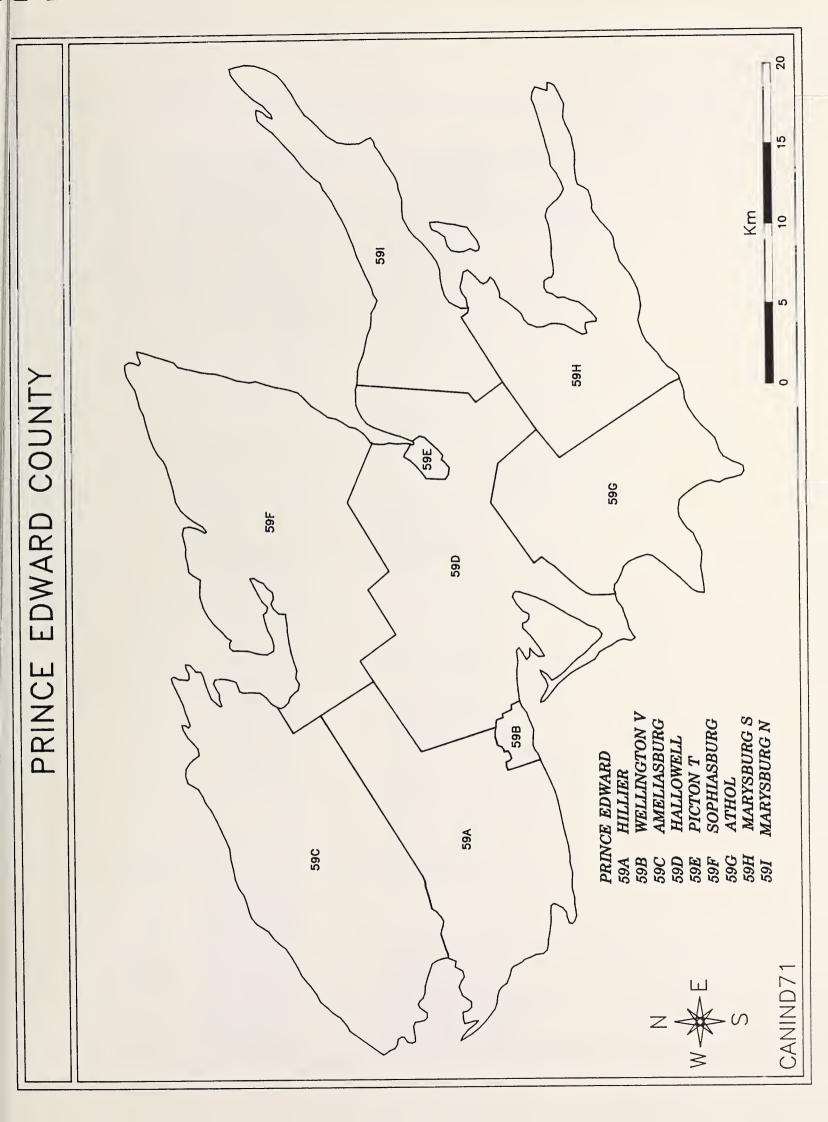
Prince Edward County's mean value of industrial production per capita (\$41.16) was significantly lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 2.8, compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also much lower -- \$2,876 compared with \$5,516.

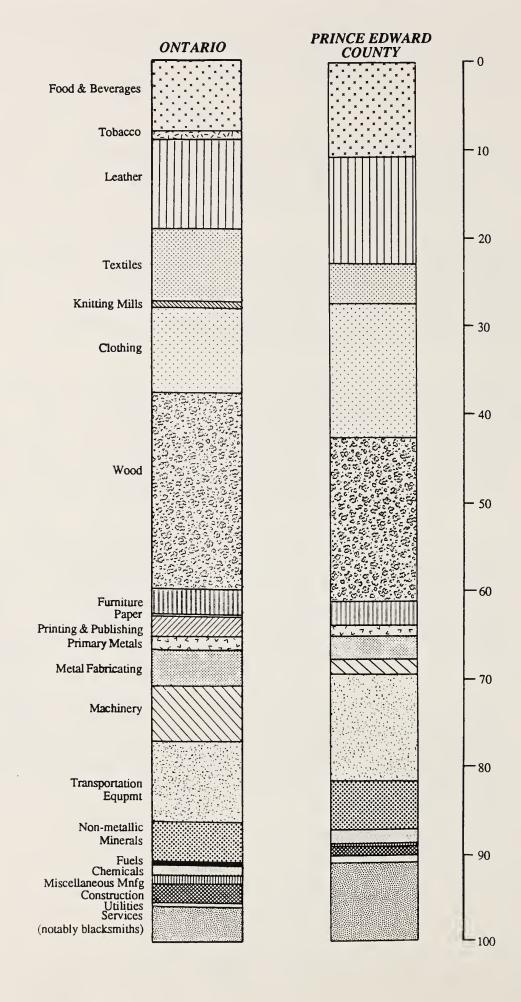
Of its total population of 20,336, only 14 per cent lived in the one county town of Picton (2,361 people) and the incorporated village of Wellington (517), which together accounted for 36 per cent of the county's modest industrial output. Like most county towns, Picton had a lower proportion of its population employed in industry than the mean for all Ontario urban centres. However the town did show some specialization, more than one in three of its industrial workers being reported in clothing workshops.

When Prince Edward County's industrial structure is compared with that of all Ontario, the mix is found to be quite well balanced and typical of rural areas. The diagram overpage has been designed to show these as clearly as possible, using major industry groups (SECs in the database). Wood processing and textile industries were under-represented, while the sectors of clothing, transportation equipment and rural services (mainly blacksmiths) each employed at least 1.5 times their average share in the province generally. Food and beverages, leather and non-metallic minerals were also above-average.

Virtually all of Prince Edward County's industrial establishments were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. More than nine of every ten workplaces in the county had five or fewer workers, a higher proportion than in Ontario generally. Prince Edward County had none of Canada's industrial leaders in 1871. Only one sawmill, in Ameliasburgh Township, reported more than 50 employees, all other establishments in the county employing 25 or fewer.

Industrial employees in Prince Edward County were recorded in workplaces which were more smaller and more artisanal, more dependent on hand power than in Ontario generally. Manual power, not assisted by waterwheels or steam engines supported nearly 43 per cent of the county's industrial output, compared with a mean of only 31 per cent across the province. Waterwheels supported 35 per cent of production, compared with 29 per cent in the whole province.





		OBSERV		FORCE		FIXCAP	<u>a</u>	TOTEMP	<u> </u>	SUMPROC	i oc	VADD	
		SUM	PERC-	NOS	PERC- ENT	SUM	PERC- ENT	SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC												
PRINCE EDWARD	1	ਜ	0.3	•	•	150	0.0	т	0.1	342	0.0	0	0.0
	5.01	37	12.7	430	36.9	106295	34.1	98	10.5	285816	34.1	48843	14.2
	5.04	41	14.1	36	3.1	25830	8.3	101	12.3	98591	11.8	52956	15.4
	5.05	20	6.9	63	5.4	14414	4.6	37	4.5	23037	2.8	7331	2.1
	5.07	22	7.6	-		24122	7.7	124	15.1	91700	11.0	44550	13.0
	5.08	40	13.7	528	45.4	54575	17.5	155	18.9	145320	17.4	53989	15.7
	5.09	7	2.4	19	1.6	2600	1.8	21	2.6	13512	1.6	11192	3.3
	5.12	1	0.3	12	1.0	8000	2.6	13	1.6	10000	1.2	6000	1.7
	5.13	10	3.4	-	-	6850	2.2	18	2.2	16560	2.0	11080	3.2
	5.14	4	1.4	32	2.7	8400	2.7	16	1.9	17100	2.0	13700	4.0
	5.15	26	6.8	-	•	25700	8.2	100	12.2	63446	7.6	45092	13.1
	5.17	19	6.5	44	3.8	14290	4.6	46	5.6	18454	2.2	11579	3.4
	5.19	4	1.4	•	•	3000	1.0	13	1.6	6260	0.7	2460	0.7
	5.2		0.3	-	-	120	0.0	1	0.1	200	0.1	350	0.1
	9	7	0.3		-	1500	0.5	8	1.0	7000	0.8	4200	1.2
	8	9	2.1	•	-	1750	9.0	10	1.2	5750	0.7	5225	1.5
	10	51	17.5	-	•	11505	3.7	72	8	33565	4.0	25159	7.3
ALL		291	291 100.0]	1164	1164 100.0	312101	100.0	822	100.0	836953 100.0	100.0	343706	100.0

With many of its townships still undergoing settlement, Renfrew County was part of Ontario's pioneer fringe in 1871 and did not reach its maximum rural population until the early twentieth century. The county's average rural population density of under 8 persons per square mile was only about one-seventh that of the most maturely settled townships of southern Ontario. Apart from a short line connecting the Arnprior area in the southeast corner with Ottawa, Renfrew County had no railways by 1871.

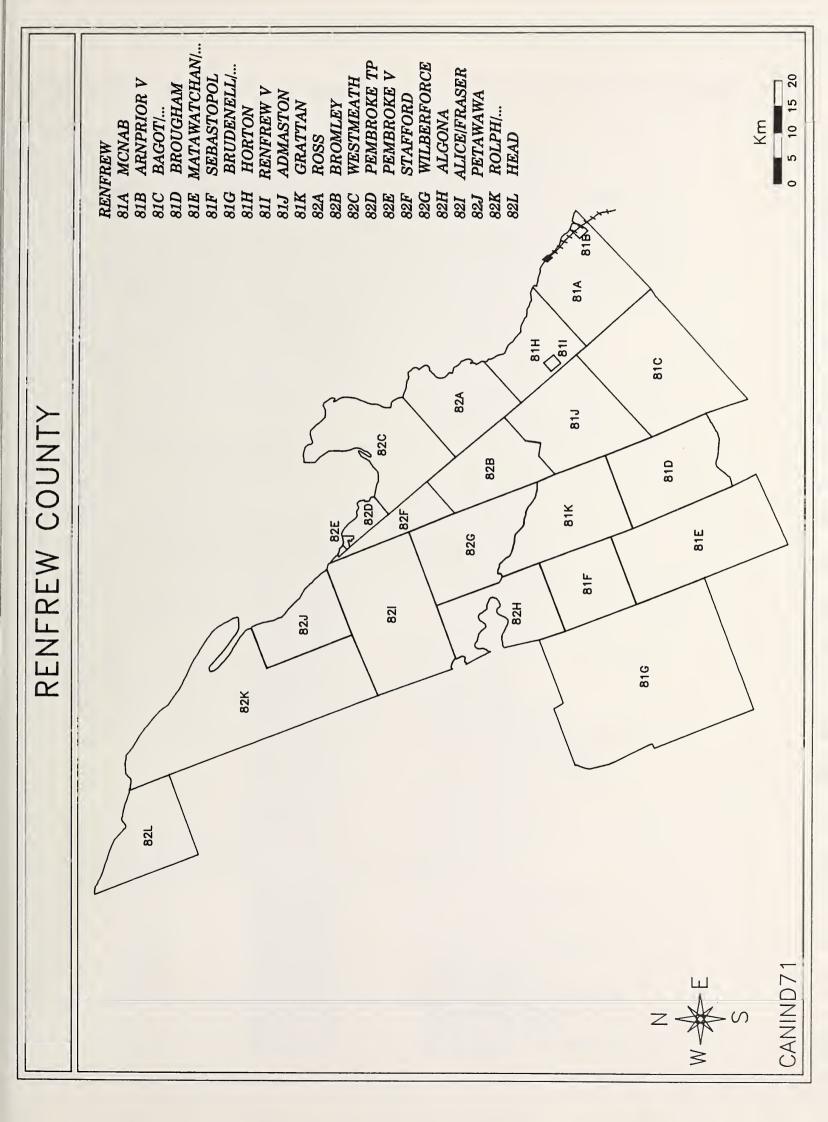
Renfrew County was less industrialized than other parts of the province. The mean value of industrial production per capita (\$37.76) was only about half the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 2.8 in Renfrew compared with 4.4 in Ontario as a whole, and the mean value of output per establishment was also significantly lower -- \$3,018 compared with \$5,516.

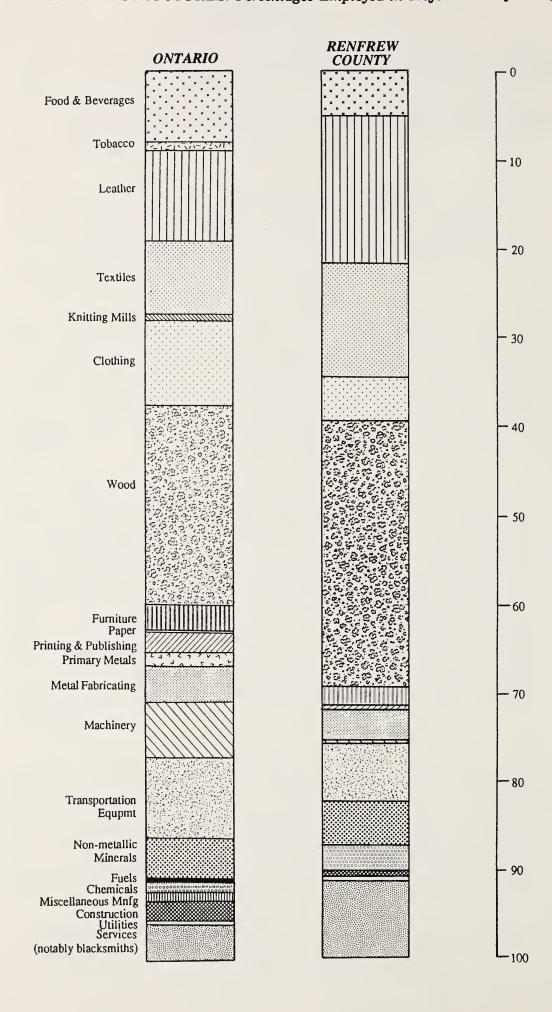
Because the county was still undergoing agricultural settlement, its urban centres were relatively more significant than in more developed regions of southern Ontario. One in seven of the total county population of 27,977 lived in the incorporated villages of Pembroke (population 1,508), Arnprior (1,714) or Renfrew (858). While none of these villages had above-average proportions of their people employed in industry, their businesses produced over two-thirds of the county's total industrial output. Both Arnprior and Renfrew were sawmilling towns, with 58 and 33 per cent respectively of their workforces employed in the wood products sector in 1871.

When Renfrew County's industrial structure is compared with that of all Ontario, we find that several sectors were distinctively stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). Wood processing, the largest industrial sector in Renfrew as in Ontario generally, was located outside urban areas and often on the margins of settlement. Textile production, in which Renfrew County had more than 1.5 times the Ontario proportion, was usually located in rural areas and small villages. The making of clothing and the metals and machinery sectors, typically concentrated in urban centres, was weakly represented in Renfrew County. Leather products, non-metallic minerals (including lime kilns, and the making of bricks, tiles and pottery), chemicals, and rural services (mainly blacksmiths) were sectors which in Renfrew County employed at least 1.5 times their shares in Ontario as a whole.

Most of Renfrew County's industrial establishments were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Ninety-three per cent of workplaces in the county had five or fewer workers, a higher proportion than in Ontario generally. The county's largest enterprises, the McLaughlin sawmill at Arnprior, employed 100 and produced \$110,000 worth of output but did not quite rank among the top one per cent of Canadian industrial businesses in 1871. Only one other sawmill employed as many as 26 workers.

Waterwheels, which supported 65 per cent of industrial output, were much more significant than other forms of power in Renfrew County.





		OBSERV		FORCE	EI .	FIXCAP	<u>-</u> -	TOTEMP	<u> </u>	SUMPROC))	VADD	
		SUM	PERC- BNT	SUM	PERC- BNT	NOS	PERC- ENT	SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC						_						
RENFREW	5.01	15	4.3	570	35.5	87600	27.0	39	4.0	305752	28.9	60767	12.7
	5.04	62	17.71	20	1.2	28442	8.8	161	16.6	126622	12.0	72948	15.2
	5.05	99	18.9	26	3.5	22541	6.9	128	13.2	77655	7.4	28950	6.0
	5.07	14	4.0		-	8300	2.6	48	4.9	39542	3.7	15361	3.2
	5.08	47	13.4	891	55.5	128430	39.6	293	30.2	356455	33.7	201964	42.2
	5.09	10	2.9	12	0.7	4825	1.5	20	2.1	10449	1.0	6865	1.4
	5.11	2	0.6	-		2000	9.0	3	0.3	3600	0.3	3100	9.0
	5.13	13	3.7	49	3.1	13050	4.0	34	3.5	32427	3.1	14999	3.1
	5.14	4	1:1	5	0.3	2230	0.7	9	0.6	4745	0.4	3513	0.7
	5.15	21	0.9	1	0.1	9810	3.0	64	9.9	37470	3.5	24372	5.1
	5.17	24	6.9		0.1	1623	0.5	48	4.9	9691	0.9	7316	1.5
	5.19	22	6.3			934	0.3	35	3.6	1774	0.2	1377	0.3
	9	2	0.6	-	-	550	0.2	3	0.3	1336	0.1	1186	0.2
	8		0.3		-	400	0.1	3	0.3	1600	0.2	1571	0.3
	10	47	13.4		-	13820	4.3	85	8.8	47310	4.5	34382	7.2
ALL		350	350 100.0	1605	1605 100.0	32455	100.00	970	100.01	970 100.0 1056428	100.0	478671	100.0

COUNTY-RENFREW ----

SIMCOE COUNTY

One of the largest counties in southern Ontario, Simcoe County illustrates a cross-section from earlier developed areas in the south and centre that were generally quite mature by 1871 to the northern townships that were still part of Ontario's pioneer and lumbering fringe. The Northern Railway skirted the western shore of Lake Simcoe and then crossed the central part of the county to reach Georgian Bay at Collingwood. The average density of rural population was 29 persons per square mile, compared with over 60 in York and Wentworth counties. Industrialization was less developed and on a smaller scale in Simcoe County than in southern Ontario generally. The mean value of output per capita was \$61.05 compared with \$74 in Ontario; the industrial establishments averaged a value of output of \$3,644 (\$5,516 in Ontario).

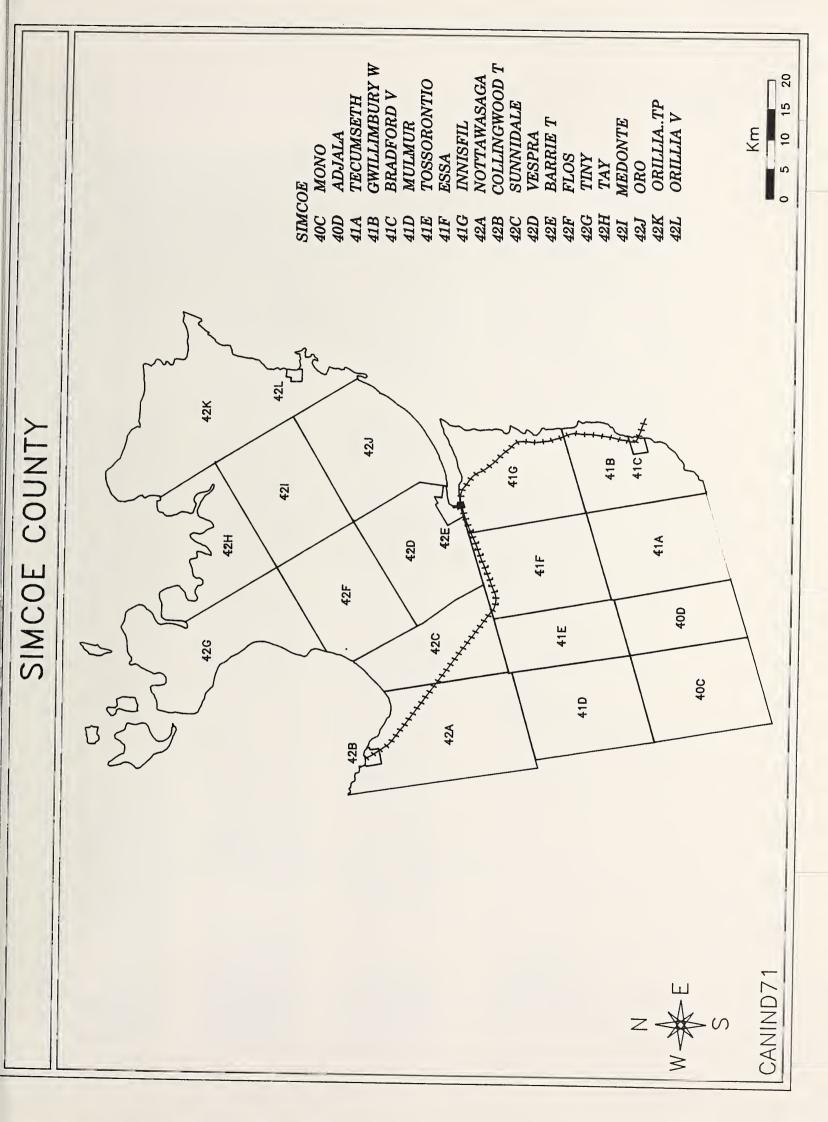
Only 15 per cent of Simcoe County's 56,762 people lived in the towns of Barrie (3,398) or Collingwood (2,829) or the villages of Orillia (1,400) or Bradford (1,130), but workers in these incorporated urban places produced nearly one third of the county's industrial output. Compared with other urban centres in Ontario, all four places had somewhat below-average shares of their people working in mills, factories and workshops. Unincorporated villages with more than 500 people were Bell Ewart, Cookston, Glencairn, Penetanguishene and Stayner. Townships with fairly high levels of industrial activity were Nottawasaga (for size of output), Tay (output and number of workers), and Sunnidale (workers).

As the diagram overpage illustrates, Simcoe County's industrial structure was most remarkable for the strength of its wood-processing sector (nearly 2.5 time the size of this dominant sector in the whole province). The small sector of knitwear products was also disproportionately developed. All other sectors except furniture were correspondingly smaller in Simcoe than in the province generally. The diagram also illustrates the industrial structures of Barrie and Collingwood. Both towns were highly specialized in wood products, while Barrie also had at least 1.5. times its share in leather products, construction, and printing and publishing. Collingwood's printing and publishing was also relatively strong.

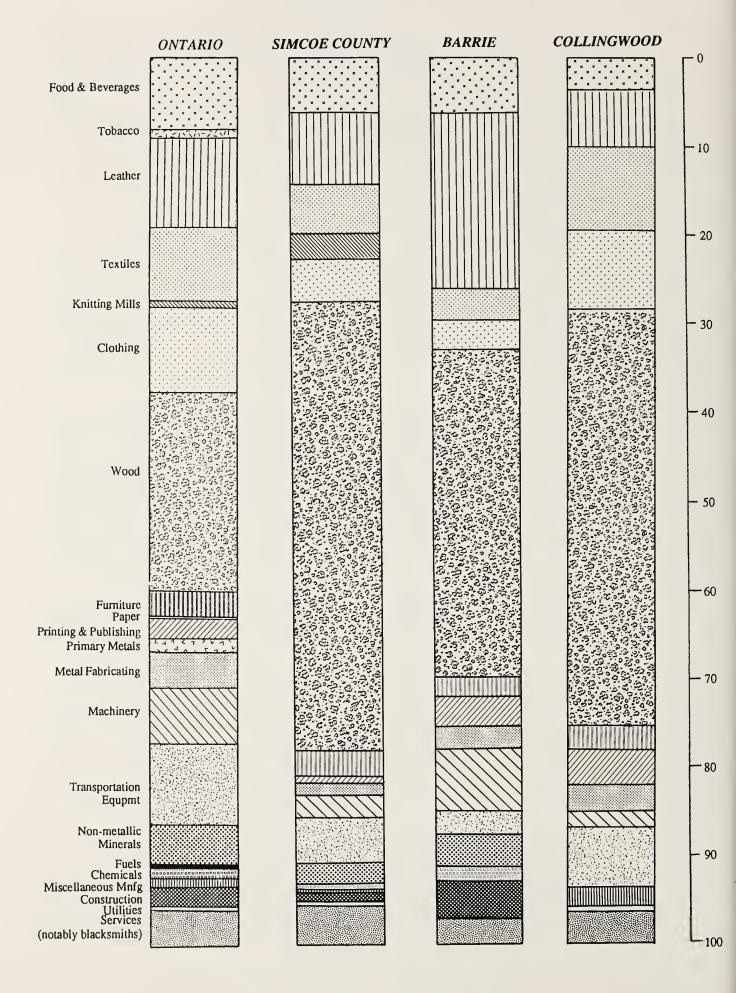
Inanimate power -- both steam and water -- was more significant in Simcoe County than in most other parts of Ontario. Steam engines powered nearly 39 per cent of industrial output in Simcoe County and waterwheels 35 per cent (compared with 36 per cent and 29 per cent respectively in the province generally).

With some notable exceptions, Simcoe County businesses were a little smaller than industrial units generally in Ontario. Hundreds of small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers -- made up most of the county's industrial units in 1871. Over 88 per cent of the county's workplaces had five or fewer employees; the average number of employees per establishment was 3.7 (for Ontario as a whole it was 4.4). An interesting detail of the census record for Simcoe County is the information for 100 female hand-knitters in Sunnidale Township.

Three enterprises in Simcoe County, all sawmills, ranked among the top one per cent of Canadian industrial businesses in 1871. They were the Hotchkiss and Peckham mill in Collingwood and the A.R. Christie and Hotchkiss and Hewson mills in Tay Township. In addition, another five establishments employed more than 50 workers each -- a stave factory in Barrie, a saw and planing mill in Orillia, and one sawmill each in Tay, Essa and Innisfil Townships -- and 12 others employed between 26 and 50 workers.



COMPARATIVE INDUSTRIAL STRUCTURES: Percentages Employed in Major Industry Groups (SECs)



		OBSERV	≥	FORCE	Pi Pi	FIXCAP	2	TOTEMP	a.	SUMPROC	coc	VADD	
	-	SUM	PERC-	SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC		1										
SIMCOE		8	0.2	2	0.0	1400	0.1	7	0.5	10150	0.3	3800	0.2
			0.1	* * * * * * * * * * * * * * * * * * *			•	2	0.1	126	0.0	•	
	5.01	65	6.8	1399	22.8	323308	19.6	173	4.9	980300	28.3	175993	11.0
	5.04	116	12.2	97	1.6	75197	4.6	292	8.3	298094	8.6	155714	9.8
	5.05	78	8.2	255	4.1	73880	4.5	193	5.5	140199	4.0	56527	3.5
	5.06	86	10.3			0		100	2.9	1432	0.0	722	0.0
	5.07	56	5.9			22866	7.4	165	4.7	104675	3.0	40793	2.6
	5.08	205	21.6	4176	6.79	883730	53.5	1799	51.3	1421398	41.0	806856	50.6
	5.09	24	2.5	108	1.8	76200	4.6	87	2.5	62390	1.8	48378	3.0
	5.11	6	0.9	6 * C	• 	22100	1.3	34	1.0	26700	0.8	18550	1.2
	5.12	7	0.1	8	0.1	2000	0.1	3	0.1	1996	0.1	1400	0.1
	5.13	21	2.2	9	0.1	15527	6.0	50	1.4	54327	1.6	32894	2.1
	5.14	21	2.2	80	1.3	53238	3.2	66	2.8	83186	2.4	64142	4.0
	5.15	72	7.6	11	0.2	45140	2.7	164	4.7	116974	3.4	82051	5.1
	5.17	37	3.9	0	0.0	6477	0.4	88	2.5	27309	0.8	15148	0.9
	5.19	12	1.3	•		6531	0.4	23	0.7	11310	0.3	6804	0.4
	5.2	2	0.2	•	•	1800	0.1	7	0.2	3520	0.1	1820	0.1
	9	8	0.8	2	0.0	4150	0.3	37	1.1	13070	0.4	6304	0.4
	7	1	0.1	1	0.0	4000	0.2	₽ -1	0.0	•	٠	•	-
	60	4	0.4		•	520	0.0	4	0.1	770	0.0	605	0.0
	10	118	12.4	1	0.0	34613	2.1	178	5.1	107482	3.1	76560	4.8
ALL		951 100	100.01	6149	100.0	1652677 100.0	100.0	3506	100.0	3465408	100.0	1595061	100.0

- COUNTY-SIMCOR

STORMONT, DUNDAS AND GLENGARRY COUNTY

Administered together as one unit, the Stormont, Dundas and Glengarry geographic counties extended about 60 miles along the north shore of the St Lawrence River to the boundary with the province of Quebec. First settled by Loyalist refugees in the 1780s, the region did not reach its peak rural population levels until the 1880s. In 1871, its rural population densities ranged between 41 and 44 persons per square mile and the Grand Trunk Railway line ran the length of the county close to the St Lawrence. But the county's average value of industrial production per capita (\$33.20) was much lower than the mean for the province (\$74). The scale of operation was also smaller, with an average 2.3 employees per industrial establishment (4.4 per cent in Ontario) and a mean value of output per establishment of \$1,935 (\$5,516 in Ontario).

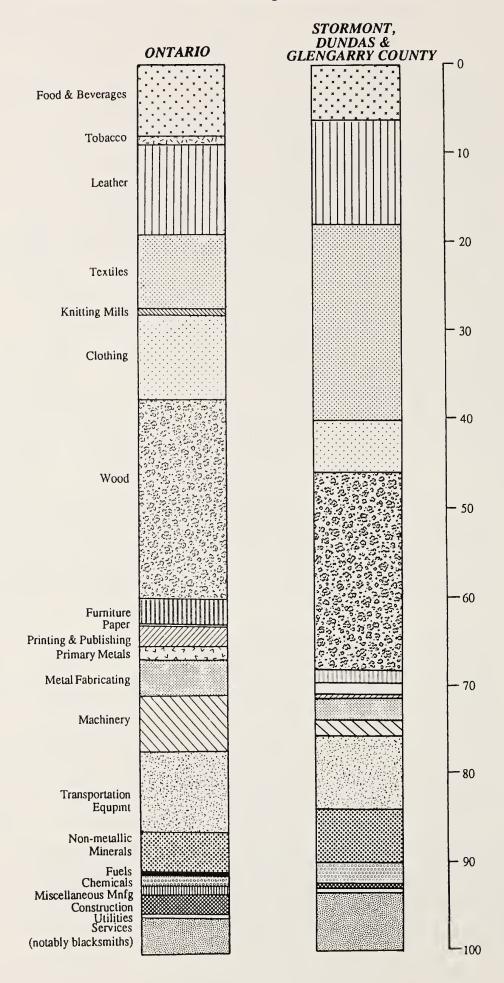
Only one in fifteen of the total county population of 58,288 lived in the county town of Cornwall (2,033 people) or the villages of Iroquois (786) or Morrisburg (1,156), which together produced 30 per cent of the county's total industrial output. Neither Cornwall nor Morrisburg was remarkable for its industrial functions, but a large share of the people of Iroquois was engaged in the wood processing industry. Outside these incorporated urban centres, Cornwall Township had the highest industrial statistics, mainly reflecting the very large woollen mill close to but outside the town of Cornwall. Alexandria (800 people, on the boundary between Lochiel and Kenyon Townships) was the only unincorporated village with more than 500 people.

When the industrial structure of Stormont, Dundas and Glengarry County is compared with that of all Ontario, we see a well-balanced mix typical of much of rural Ontario. The diagram overpage has been designed to illustrate the county and provincial structures, using employment in major industry groups (SECs in the database). Sectors which employed at least 1.5 their mean shares were textiles (most notably), paper, non-metallic minerals, chemicals, and rural services (mainly blacksmiths).

Most of the industrial establishments in Stormont, Dundas and Glengarry County were small craftshops, over 93 per cent of all workplaces reporting five or fewer employees. Only one enterprise ranked among the top one per cent of Canada's industrial businesses -- the Cornwall Manufacturing Company's woollen mill owned by Montreal investors including Hugh Allan as president and George Stephen as vice-president. Managed by John Warwick (described as the proprietor on the manuscript census schedule), the mill burned down on Christmas Day 1870. Otherwise its statistics might have been more impressive than the 145 workers (many of them women and girls) reported to produce \$200,000 worth of output. No other workplaces in Stormont, Dundas and Glengarry County employed more than 25 workers.

In providing motive power for industrial activity, waterwheels were much more significant than steam engines or hand power in Stormont, Dundas and Glengarry County. Water power supported 55 per cent of industrial output in the county, compared with a provincial mean of 29 per cent.

5 X E S STORMONT DUNDAS AND GLENGARRY COUNTY 74B 74D 74A 74C 73D 72C 72A 72B 71C 71F 71A 74A CHARLOTTENBURG 71E STORMONT, DUNDAS MORRISBURG V WILLIAMSBURG CORNWALL TP ROXBOROUGH WINCHESTER CORNWALL W CORNWALL C CORNWALL E 71B IROQUOIS V OSNABRUCK 74B LANCASTER MOUNTAIN & GLENGARRY 71A MATILDA KENYON LOCHIEL CANIND71 FINCH **Q11** 72C 71E 71F 73B 73D 72B 73C 73A



		OBSERV		FORCE		FIXCAP	e e	TOTEMP		SUMPROC) 	VADD	
		SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC-	SUM	PERC-	SUM	PERC- ENT
COUNTY	SEC												
STORMONT-DUNDAS-	5.01	41	4.7	1036	34.0	184735	28.5	110	5.4	729072	37.7	145648	17.8
GLENGARRY	5.04	144	16.5	6	0.3	43581	6.7	236	11.6	150151	7.8	83031	10.1
	5.05	223	25.6	238	7.8	138887	21.5	462	22.6	373867	19.3	155549	19.0
	5.07	41	4.7	•	•	12515	1.9	115	5.6	53983	2.8	21482	2.6
	5.08	127	14.6	1639	53.7	154385	23.8	464	22.7	257599	13.3	141834	17.3
	5.09	19	2.2	21	0.7	6135	0.9	30	1.5	18279	0.9	13167	1.6
	5.1	1	0.1	24	0.8	·	-	24	1.2	11000	0.6	3000	0.4
	5.11	3	0.3	-	-	3500	0.5	6	0.4	2800	0.3	4600	0.6
	5.13	16	1.8	28	0.9	16400	2.5	52	2.5	49252	2.5	30358	3.7
	5.14	12	1.4	29	1.0	14120	2.2	38	1.9	45794	2.4	36800	4.5
	5.15	61	7.0	5	0.2	31486	4.9	172	8.4	83605	4.3	64913	7.9
	5.17	52	6.0	21	0.7	12238	1.9	122	6.0	53512	2.8	43558	5.3
	5.19	21	2.4	•	•	8970	1.4	46	2.3	28780	1.5	15694	1.9
	9	3	0.3	•	·	525	0.1	10	0.5	5925	0.3	4990	9.0
		3	0.3	•	•	260	0.1	4	0.2	1660	0.1	1340	0.2
	10	104	11.9	•	•	19365	3.0	146	7.2	. 66781	3.5	52836	6.5
ALL		871	100.00	3050	3050 100.0	647402 100.0	100.01	2040	100.0	2040 100.0 1935060 100.0	100.0	818800 100.0	100.0

COUNTY-STORMONT-DUNDAS-GLENGARRY ----

VICTORIA COUNTY

With many of its townships still undergoing settlement, Victoria County was part of Ontario's pioneer fringe in 1871 and reached its maximum rural population in 1881. The county's average rural population density of only 19 persons per square mile was less than one third that of the most maturely settled townships of southern Ontario. Only the southern edge of the county was served with railways that linked the county town of Lindsay to Port Hope on the Grand Trunk line along the shore of Lake Ontario.

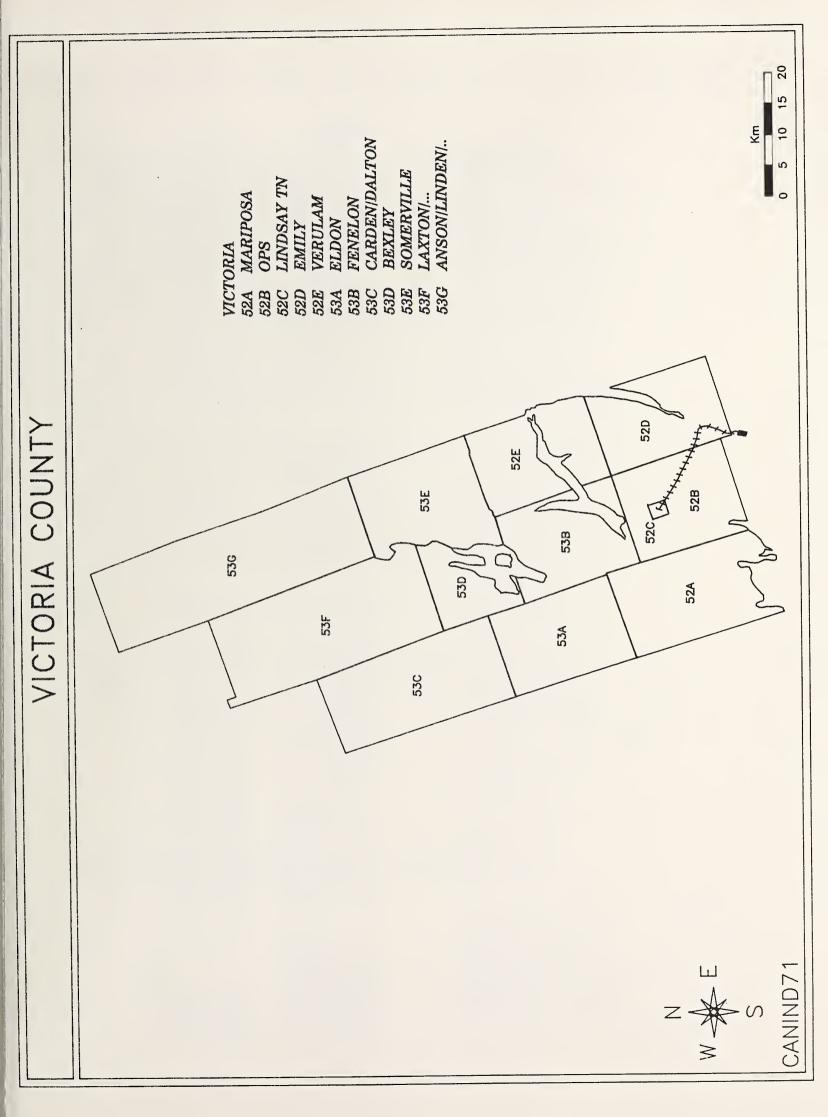
Victoria County was generally less industrialized than other parts of the province. The mean value of industrial production per capita (\$46.93) was significantly lower than the mean for Ontario (\$74.00), as were also the average number of employees per industrial establishment (3.7 in Victoria compared with 4.4 in Ontario) and the mean value of output per establishment (\$3,563 compared with \$5,516).

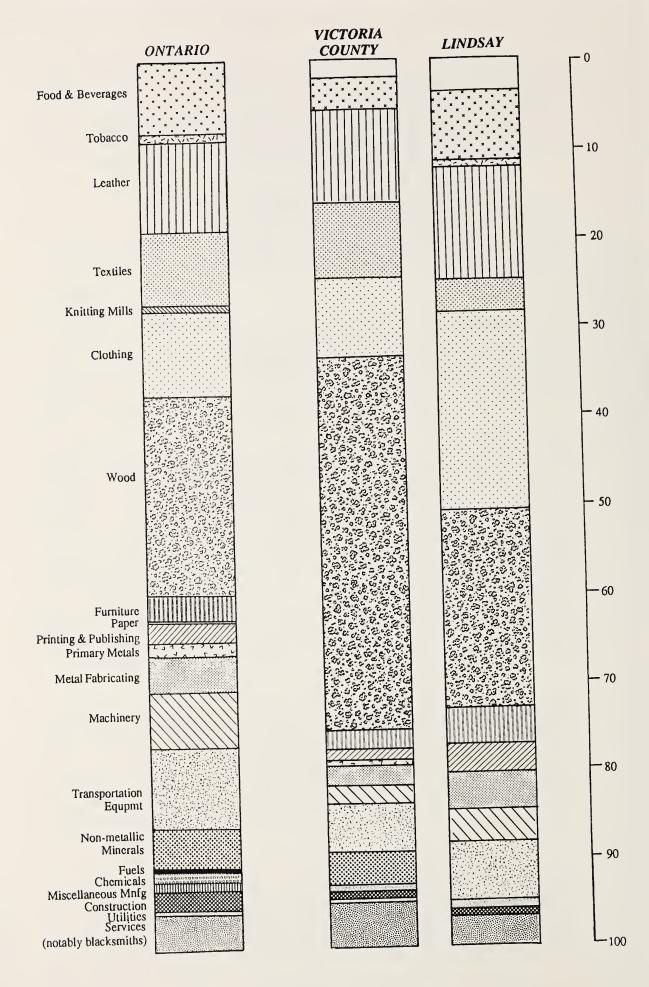
Under 14 per cent of Victoria County's total population of 29,685 lived in the county town of Lindsay (4,049) where 449 industrial workers produced over 47 per cent of the county's industrial output. Fenelon Township (including the unincorporated village of Fenelon Falls with a population of 750) was the most industrialized township; other unincorporated villages with more than 500 people were Bobcaygeon (1,000 people) and Omemee (600).

When Victoria County's industrial structure is compared with that of all Ontario, the mix is found to be typical of rural areas on the margins of settlement. The diagram overpage has been designed to show these as clearly as possible, using major industry groups (SECs in the database) and also permitting comparisons of the town of Lindsay with the county and the province. The unshaded portion at the top of county and Lindsay bars refers to forestry extraction activities such as raft building and tanbark. Wood processing, the largest industrial sector in Victoria with more than twice the average share across Ontario, was located outside urban areas and often on the settlement frontier. Textile mills, often powered by waterwheels, were usually located in rural areas and small villages while clothing shops were typically urban, as were metal and machinery industries. In Lindsay, only the clothing sector employed at least 1.5 times its mean share in Ontario generally.

Most of Victoria County's industrial establishments were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Eighty-eight per cent of workplaces in the county had five or fewer workers, a higher proportion than in Ontario generally. None of the county's establishments ranked among the top one per cent of Canadian industrial businesses, but three rural sawmills employed more than 50 workers each, and two smaller workplaces (a gristmill and a clothing shop) each reported between 26 and 50 employees.

In providing motive power for industrial activity, waterwheels were somewhat more important than steam engines in Victoria County. Water power, harnessed on the many rivers and streams flowing over the edge of the shield, supported 33 per cent of industrial output in the county, compared with a provincial mean of 29 per cent. Hand power was also slightly more important than in Ontario generally.





		OBSERV		FORCE	H	FIXCAP	<u>-</u>	TOTEMP	- A	SUMPROC	COC	VADD	
		NOS	PERC- ENT	SUM	PERC-	SUM	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC												
VICTORIA	2	-	0.3	09	2.2	4500	0.7	12	0.8	30750	2.2	17950	2.9
	5.01	15	3.8	400	14.9	89160	13.4	56	3.8	351382	25.2	71894	11.5
	5.03	1	0.3	9	0.2	2000	0.8	4	0.3	2000	0.4	3000	0.5
	5.04	57	14.6	67	2.5	49770	7.5	150	10.3	139507	10.0	74227	11.9
	5.05	73	18.7	83	3.1	44674	6.7	127	8.7	67246	4.8	25612	4.1
	5.07	30	7.7	•	•	19346	2.9	128	8.8	81689	5.9	38209	6.1
	5.08	74	18.9	1912	71.3	336271	50.5	622	42.6	450548	32.3	197380	31.5
	5.09	12	3.1	23	6.0	13350	2.0	33	2.3	23600	1.7	20422	3.3
	5.11	3	0.8	·	•	9200	1.4	16	1.1	13305	1.0	9605	1.5
	5.12	1	0.3	•	-	1000	0.2	4	0.3	4000	0.3	3600	9.0
	5.13	17	4.3	48	1.8	22400	3.4	41	2.8	47950	3.4	32801	5.2
	5.14	7	1.8	45	1.7	16950	2.5	31	2.1	25992	1.9	18602	3.0
	5.15	24	6.1	27	1.0	25275	3.8	78	5.3	55700	4.0	37683	6.0
	5.17	22	5.6	8	0.3	4834	0.7	56	3.8	12922	0.9	10709	1.7
	5.19	7	1.8	•	•	3770	0.6	12	0.8	5018	0.4	2396	0.4
	9	2	0.5	•	•	1550	0.2	8	0.5	24100	1.7	23207	3.7
	8	1	0.3	·	-	100	0.0	1	0.1	120	0.0	100	0.0
	10	44	11.3	1	0.0	18506	2.8	82	5.6	54437	3.9	38917	6.2
ALL		391	100.01	2680	2680 100.0	665656 100.0	100.001	1461	1461 100.0	1393266 100.0	100.0	626314	100.0

-- COUNTY-VICTORIA -----

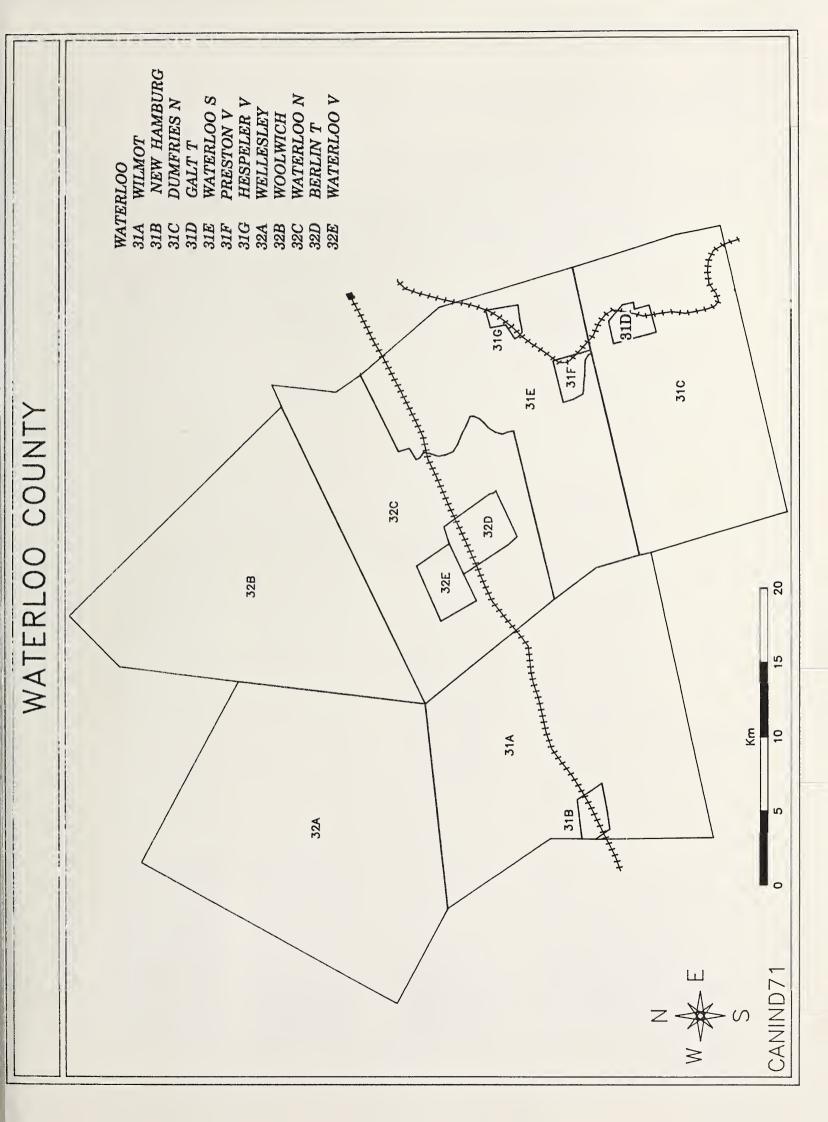
Settled from the very early years of the century, Waterloo County formed part of the maturely developed zone of the province by 1871, more densely populated in its rural areas and more urbanized and industrialized than most of southern Ontario. The mean value of industrial production per capita (\$118.64) was 1.6 times the mean for Ontario (\$74.00). But the scale of industrial activity was generally small, with an average 4.3 employees per industrial establishment in Waterloo compared with 4.4 in Ontario, and a mean value of output of \$6,605. in Waterloo compared with an Ontario mean of \$5,516. Most of Waterloo County's industrial units were small craftshops—blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers—though the proportion of workplaces with five or fewer employees was smaller than in Ontario generally.

When Waterloo County's industrial structure is compared with that of Ontario as a whole, we find that several sectors were distinctively stronger in the county than generally in the province. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). Textiles and machinery especially and also furniture were sectors which in Waterloo County employed at least 1.5 times their share in all Ontario.

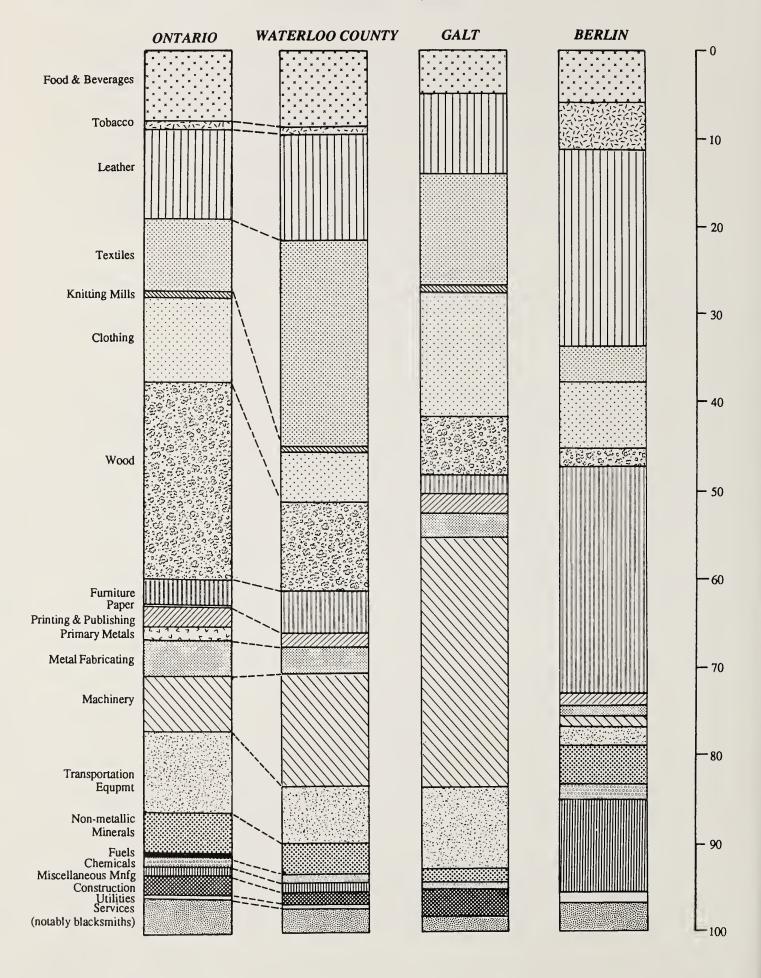
The diagram also illustrates the industrial structure of the two towns of Galt and Berlin in relation to Waterloo County and the whole province. Some features of industry types in Galt and Berlin reflect the strength of particular enterprises and local specializations. A notable example is the business of Goldie and McCulloch, later Babcock and Wilcox, which swelled the size of Galt's machinery sector. Manufacturing engines, boilers and a miscellany of industrial machinery, this firm employed 200 of the 635 men in Galt's industrial workplaces and contributed over one quarter of the total value added in manufacturing in the town. Compared with other urban centres of Ontario, Galt combined above-average industrial activity with a specialized industrial structure. In these qualities, Galt most resembled Oshawa, Dundas, Gananoque and Ingersoll and also the somewhat larger centres of Brantford, Guelph and Brockville. Industry in the county town of Berlin was unimpressive in 1871; its industrial structure does not reflect the presence of any dominant enterprise but rather of several emerging specializations in the specific sectors of leather, furniture and miscellaneous manufactures that would shape its future industrialization.

Quite high levels of industrial use of water and steam power were recorded in the county. Water power, developed at various sites along the Grand River and its tributaries, the Speed, Nith and Conestoga, was reported by 75 establishments, especially flour and sawmills in rural areas, and supported 46 per cent of output, compared with an Ontario mean of 29 per cent. The largest water-power capacities were both in Hespeler, at George Hespeler's distillery (200 horse-power) and the Randall Farr worsted and woollen mill (100 horse-power). Steam engines were used by 80 establishments, more typically in urban centres. Some flour, cloth and sawmills in urban centres, originally established with waterwheels, had been obliged to add steam engines to boost productive capacity and so reported both water and steam power.

Women and girls formed a slightly higher proportion of the industrial workforce in Waterloo County than in Ontario generally. The Randall Farr woollen textile mill in Hespeler was by far the largest employer, with its 44 women and 57 girls, but nine other woollen mills and ten establishments in other product lines - making clothing, tobacco products, buttons or rope, and scutching flax - reported at least six female workers.



COMPARATIVE INDUSTRIAL STRUCTURES: Percentages Employed in Major Industry Groups (SECs)



		OBSERV	2	FORCE	H	FIXCAP	9	TOTEMP	e e	SUMPROC	သင္	VADD	
		SUM	PERC	SUM	PERC-	SUM	PERC- ENT	SUM	PERC-	SUM	PERC- ENT	SUM	PERC-
COUNTY	SEC												
WATERLOO	1	—	0.1		0	1870	0.1	60	0.1	3450	0.1	069	0.0
	5.01	72	10.0	1447	37.7	452305	30.0	250	8.1	2044322	42.8	513857	27.1
	5.02	4	0.6	12	0.3	15500	1.0	34	eri eri	43200	0.9	13650	0.7
	5.04	133	18.4	128	3.3	104319	6.9	371	12.0	452911	9.5	196284	10.3
	5.05	78	10.8	627	16.3	362822	24.0	725	23.4	913253	19.1	351307	18.5
	5.06	2	0.3			2900	0.2	13	0.4	5800	0.1	3300	0.2
	5.07	46	6.4	•	•	21637	1.4	180	7. 83	170600	3.6	72365	3.8
	5.08	102	14.1	1001	28.4	121660	8.1	331	10.7	260501	5.5	122452	6.4
	5.09	16	2.2	136	3.5	44900	3.0	136	4.4	95960	2.0	68339	3.6
	5.11	6	1.2			27600	8.1	45	1.5	22500	0.5	16250	6.0
	5.12	2	0.3	23	9.0	3400	0.2	11	0.4	5100	0.1	3250	0.2
	5.13	30	4.1	67	1.7	30490	2.0	81	2.6	79175	1.7	47526	2.5
	5.14	28	3.9	172	4.5	193860	12.8	401	12.9	361302	7.6	283167	14.9
	5.15	69	9.5	70	1.8	61757	4.1	205	9.9	147001	3.1	91149	4.8
	5.17	39	5.4	14	0.4	11220	0.7	115	3.7	41493	0.9	32782	1.7
	5.19	7	1.0	10	0.3	15575	1.0	25	0.8	19220	0.4	9939	0.5
	5.2	9	0.8	11	0.3	8430	0.6	36	1.2	15550	0.3	8030	0.4
	9	12	1.7	30	0.8	8325	9.0	46	1.5	37250	0.8	25790	1.4
	8	2	0.7		·	1250	0.1	5	0.2	2550	0.1	1440	0.1
	10	62	8.6	•	•	19795	1.3	88	2.8	54407	1.1	37343	2.0
ALL		723	100.00	3838	100.0	1509615	100.0	3101	100.0	100.0 4775545	100.0	1898910	100.0

WELLAND COUNTY

Part of the maturely developed zone of the province by 1871, Welland County had not yet been affected by industrialization on a substantial scale. Its industrial growth would occur in the early twentieth century when the power of Niagara Falls was fully harnessed. Welland County was less highly industrialized than other parts of the province, in contrast to neighbouring Lincoln County, with which it shared the Welland Canal system and several railways near the international border. The county's extensive railway network and the Welland Canal were apparently used for the carrying trade.

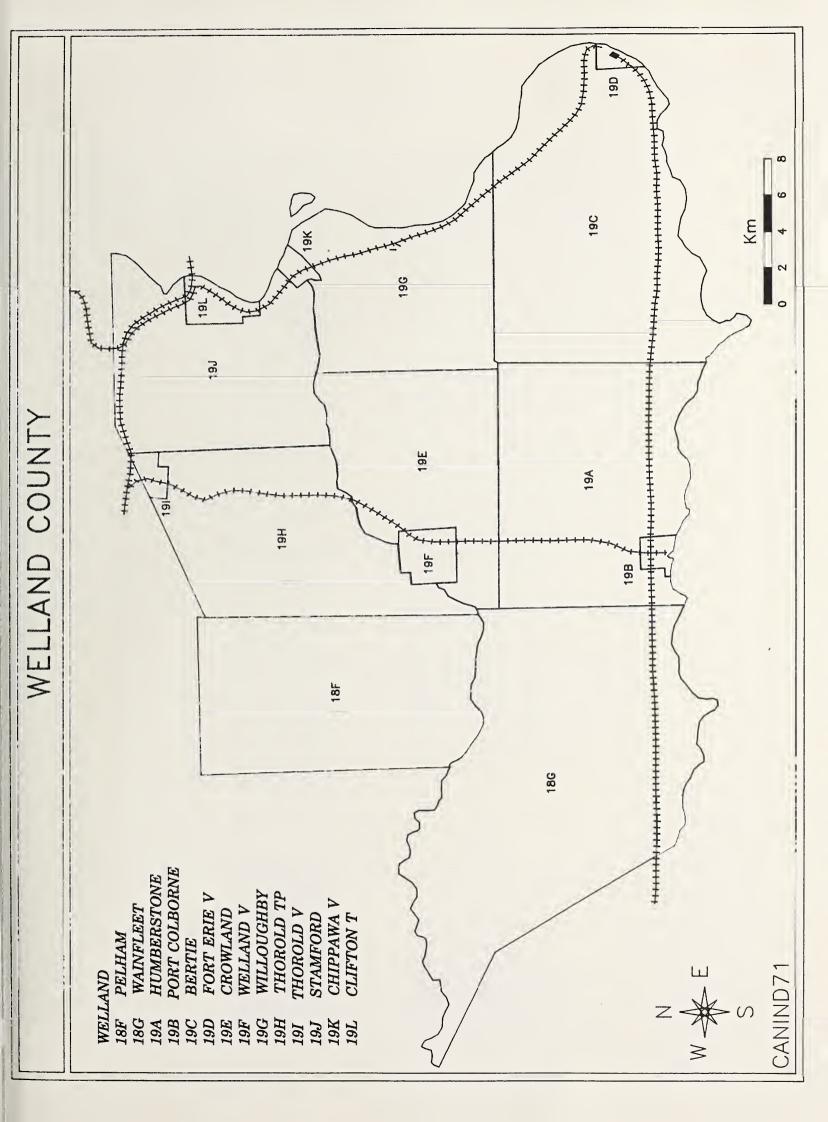
The mean value of industrial production per capita (\$60.42) in Welland County was significantly lower than the mean for Ontario (\$74.00). The average number of employees per industrial establishment was only 2.6 in Welland compared with 4.4 in all Ontario, and the mean value of output per establishment was also significantly lower -- \$4,085. compared with \$5,516.

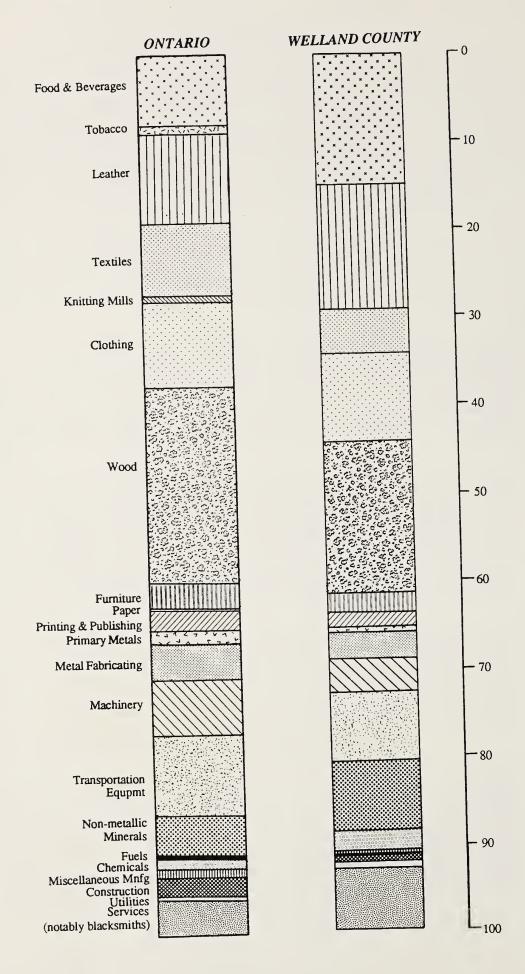
Of Welland County's total population of 25,760, a little more than one in four lived in the small villages of Clifton, Thorold, Welland. Chippawa, Port Colborne and Fort Erie. But these small urban places were unremarkable for their industrial activity. In an analysis of all Ontario urban centres, all those in Welland County were found to rank well below the Ontario mean for level of industrialization and to lack any industrial specialization or leading enterprise.

When Welland County's industrial structure is compared with that of the whole province, we find that several sectors were distinctively stronger in the county. The diagram overpage has been designed to show these differences as clearly as possible, using major industry groups (SECs in the database). Local establishments in food and beverages, leather, non-metallic minerals and blacksmiths employed at least 1.5 times their overall proportions in Ontario as a whole. Textiles, wood products, machinery and construction were underrepresented.

Given the small dimensions of industry in the county, the strength of some sectors was influenced by the presence of specific large enterprises. Thus the Thomas distillery in Willoughby Township accounted for nearly one third of the total value of output in food and beverages, and the Macklem and Kirkpatrick tannery for nearly three-fifths of the output of leather products. The four top enterprises reporting at least \$80,000 worth of output each in 1871 accounted for well over 35 per cent of the county's industrial production.

Most of Welland County's industrial establishments were very small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers. Ninety-one per cent of workplaces in Welland County had five or fewer workers, a higher proportion than in Ontario generally, and no workplaces had more than 23 employees. Rural industrial employees in Welland County were recorded in workplaces which were more artisanal, smaller and more dependent on hand power than in rural Ontario generally.





	\$ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	OBSERV		FORCE		FIXCAP		TOTEMP	d.	SUMPROC	၁၀	VADD	
		SUM PI	PERC-	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC												
WELLAND	5.01	46	12.1	294	23.0	159125	35.6	151	15.0	753696	48.4	287949	40.5
	5.02	1	0.3	•	•			1	0.1	200	0.0	345	0.0
	5.04	65 1	17.1	44	3.4	32980	7.4	147	14.6	227991	14.6	109058	15.3
	5.05	21	5.5	140	10.9	18262	4.1	47	4.7	62568	4.0	24884	3.5
	5.07	35	9.2	-	•	4771	1:1	101	10.0	87796	5.6	36129	5.1
	5.08	51	13.4	637	49.8	102625	23.0	176	17.5	187611	12.1	88089	12.4
	5.09	11	2.9	11	0.9	5625	1.3	21	2.1	13155	0.8	11119	1.6
	5.11	4	1.0	-	•	4200	0.9	18	1.8	11500	0.7	8950	1.3
	5.12	1	0.3	10	0.8	4000	0.9	5	0.5	2000	0.3	4000	9.0
	5.13	13	3.4	12	0.9	9950	2.2	29	2.9	23772	1.5	13400	1.9
	5.14	7	1.8	63	4.9	16400	3.7	37	3.7	28530	1.8	21085	3.0
	5.15	38	10.0	17	1.3	32850	7.3	80	7.9	55604	3.6	40291	5.7
	5.17	21	5.5	34	2.7	11935	2.7	81	8.0	32135	2.1	20085	2.8
	5.19	6	2.4	•	•	999	1.5	23	2.3	17570	1.1	8970	1.3
	5.2	3	0.8	•	•	635	0.1	4	0.4	2975	0.2	2189	0.3
	9	2	0.5	٠	•	350	0.1	7	0.7	4300	0.3	3200	0.4
	7	1	0.3	18	1.4	25000	5.6	3	0.3	2400	0.2	•	
	8	3	0.8	-	-	870	0.2	3	0.3	2560	0.2	2055	0.3
	10	49	12.9	•	•	10876	2.4	73	7.2	36748	2.4	29400	4.1
ALL		381 100.0	0.00	1280	1280 100.0	447134 100.0	100.00	1007	100.0	1007 100.0 1556411 100.0	100.0	711198 100.0	100.0

---- COUNTY-WELLAND -----

WELLINGTON COUNTY

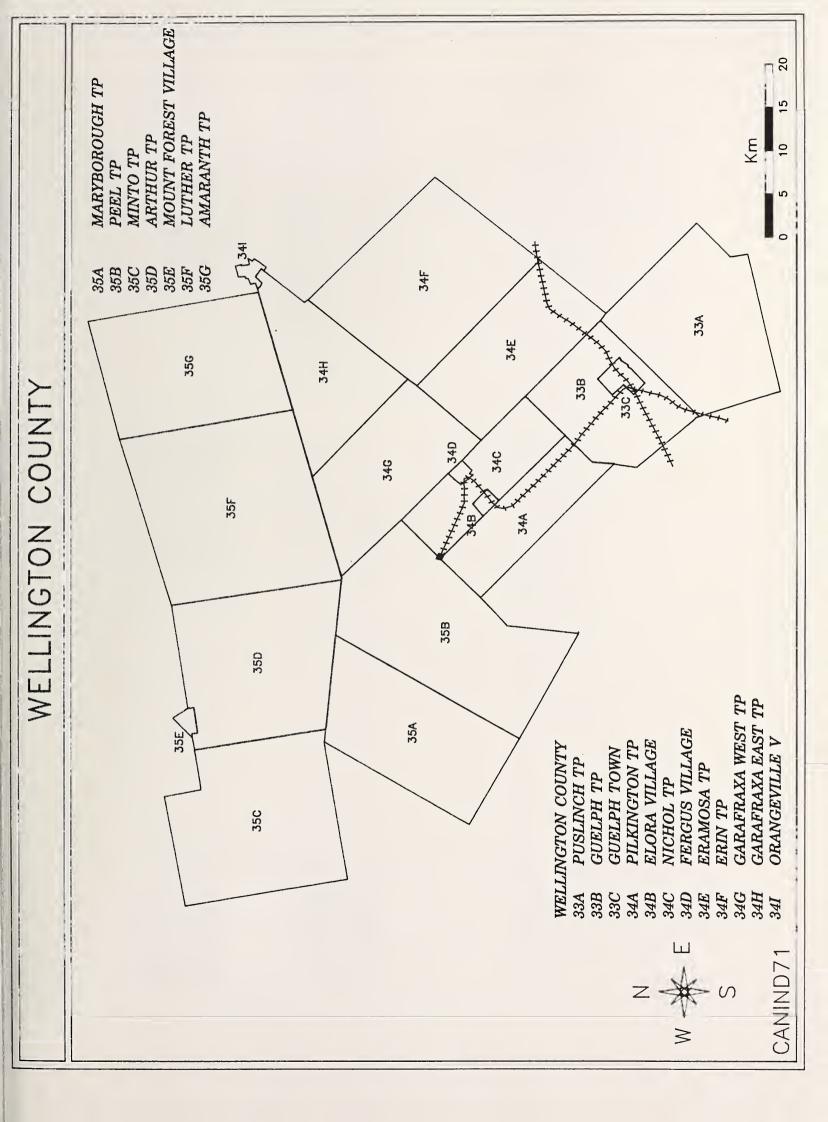
Wellington County occupied the watershed of the upper tributaries of the Grand River. Its townships illustrate a cross-section from the earlier developed areas in the south and centre that were generally quite mature by 1871 to the northern townships that were still part of Ontario's pioneer fringe. The average density of rural population was 38 persons per square mile, compared with over 60 in York and Wentworth counties. Only one in five of the county's 63,000 people lived in the urban centres of Guelph, Fergus, Elora, Mount Forest and Orangeville. Industry in Wellington County was broadly representative of southern Ontario: its average value of output per capita was \$73.30 compared with \$74. in Ontario while the value added in manufacturing per industrial worker was \$576.18, a little higher than the Ontario mean.

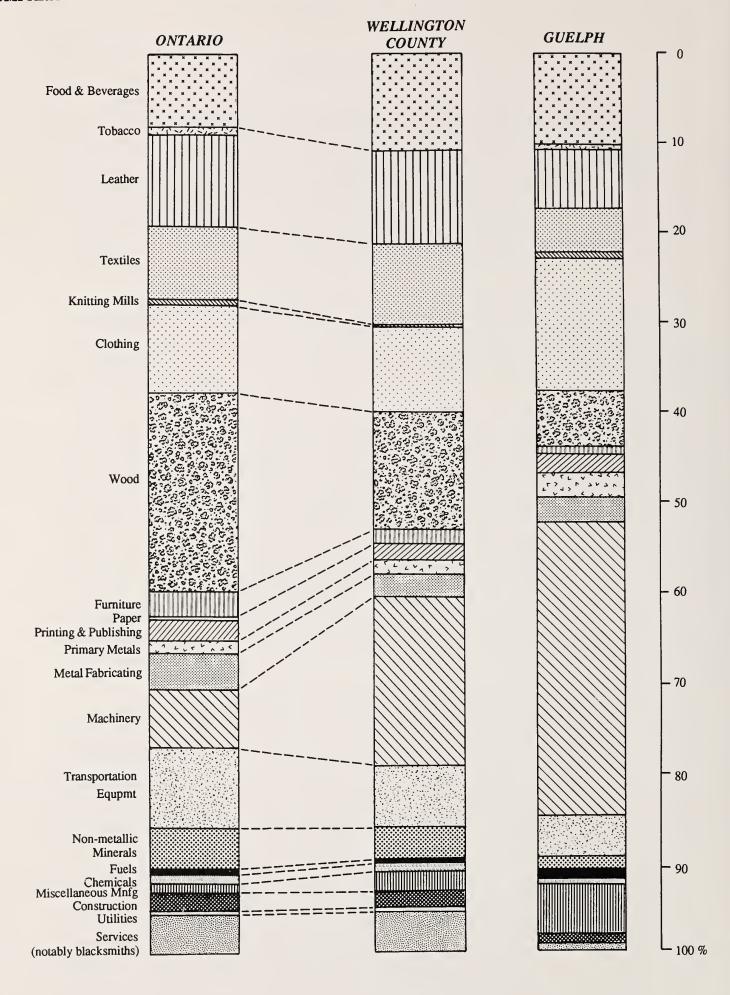
As the diagram overpage illustrates, the county's industrial structure was remarkable for the strength of foods, beverages, musical instruments and machinery (especially sewing machines). Nearly one third of Guelph's industrial workers (and 37 per cent of those in Fergus) were employed in the machinery sector, a percentage matched or exceeded only in Oshawa, and a few smaller villages such as Smith's Falls, Mitchell, Aurora, Brampton and Newcastle.

Waterwheels at sites along the Grand and its tributaries, the Speed and the Eramosa powered large mills in Guelph, Fergus, Elora, Salem, Rockwood and Eden Mills. Steam engines supported a wide variety of industry types in Guelph and in the north of the county where water-power potential was scarce. Wellington County businesses were a little smaller and relied less on inanimate power than industrial units generally in Ontario. Hundreds of small craftshops -- blacksmiths, tinsmiths, bakers, saddlers, shoemakers, tailors, milliners, weavers and knitters, coopers, carpenters, carriage and wagon makers -- made up most of the county's industrial units in 1871. The average number of employees per establishment was 4.1 (for Ontario as a whole it was 4.4). Wellington had no manufactories with 51 or more workers and a smaller share of workers in factories of at least 51 workers; larger craftshops and sweatshops were also under-represented in the county. Only in the processing of food and the manufacture of machinery did Wellington County have well above-average shares of workers in larger and powered workplaces, reflecting the local strength of these sectors.

Guelph stands out in Wellington County for its larger workplaces, with 38 per cent of the town's workers in powered factories and 16 per cent in manufactories using hand power only. All the county's factories except for one each in Fergus, Elora, and Maryborough Township were in Guelph. Three large factories made sewing machines - the Guelph Sewing Machine Company (180 workers), Charles Raymond's factory (70), and the Lockman & Wilson sewing machine plant in Fergus (75). Five smaller factories in Guelph, all using steam or water power and employing between 26 and 50 workers, were the Inglis & Hunter engine and machinery works (48), Armstrong & McCrae's woolen and knitwear factory (39), James Goldie's flour mill and cooperage (38), Edwin Armes's sewing machine factory (30) and John Crowe's iron foundry (28).

The only other powered workplaces in the county with between 26 and 50 workers were Potter's agricultural machinery works in Elora (30) and Charles Hendry's flax mill in Maryborough Township (40). Guelph also had six manufactories with between 27 and 33 workers each and no inanimate power: three were clothing shops operated by dry goods merchants employing significant numbers of women as seamstresses and one manufactured boots and shoes by hand labour. Two organ and melodeon manufactories, those of William Bell and McLeod Wood & Company, employed 32 and 27 workers, mainly men.





		OBSERV		FORCE	ą	FIXCAP		TOTEMP	<u></u>	SUMPROC	ے۔ ئ	VADD	
		NOS	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC-
COUNTY	SEC												! ! !
WELLINGTON	5.01	89	9.5	1516	42.0	515895	36.9	332	11.0	2300593	49.6	320795	18.8
	5.02	1	0.1	•	•	•	 	4	0.1	4290	0.1	2690	0.2
	5.04	112	15.2	132	3.7	101590	7.3	310	10.3	379312	8.2	179267	10.5
	5.05	85	11.5	272	7.5	95887	6.9	266	8.8	186854	4.0	84116	4.9
	5.06	1	0.1	-	-	200	0.0	9	0.2	2400	0.1	006	0.1
	5.07	61	8.3	-		25956	1.9	289	9.6	217540	4.7	99475	5.8
	5.08	110	14.9	1273	35.2	169025	12.1	393	13.1	315802	6.8	193534	11.3
	5.09	17	2.3	42	1.2	20500	1.5	44	1.5	28320	9.0	22094	1.3
	5.11	11	1.5	•		37050	2.7	58	1.9	48658	1.0	32327	1.9
	5.12	2	0.7	30	0.8	13200	0.9	45	1.5	42600	0.9	30650	1.8
	5.13	24	3.3	16	0.4	27012	1.9	69	2.3	70546	1.5	46458	2.7
	5.14	31	4.2	251	6.9	217000	15.5	572	19.0	576597	12.4	399799	23.4
	5.15	54	7.3	39	1:1	58831	4.2	208	6.9	128983	2.8	92830	5.4
	5.17	39	5.3	8	0.2	10850	0.8	107	3.6	35122	0.8	24532	1.4
	5.18	2	0.3	20	0.6	13000	6.0	14	0.5	45800	1.0	16800	1.0
	5.19	10	1.4	5	0.1	5105	0.4	23	0.8	24653	0.5	10571	9.0
	5.2	2	0.7	-	•	15640	1:1	89	2.3	105950	2.3	70440	4.1
	9	10	1.4	8	0.2	6970	0.5	55	1.8	41350	0.9	27815	1.6
		1	0.1	-	-	30000	2.1	2	0.1	1040	0.0	-88	-0.0
	8	4	0.5	-	•	2150	0.2	4	0.1	1650	0.0	895	0.1
	10	85	11.5	•	•	30600	2.2	140	4.7	77988	1.7	51692	3.0
ALL		736	100.001	3612	100.0	1396761	100.00	3009	100.0	4636048 100	100.0	1707592	100.0

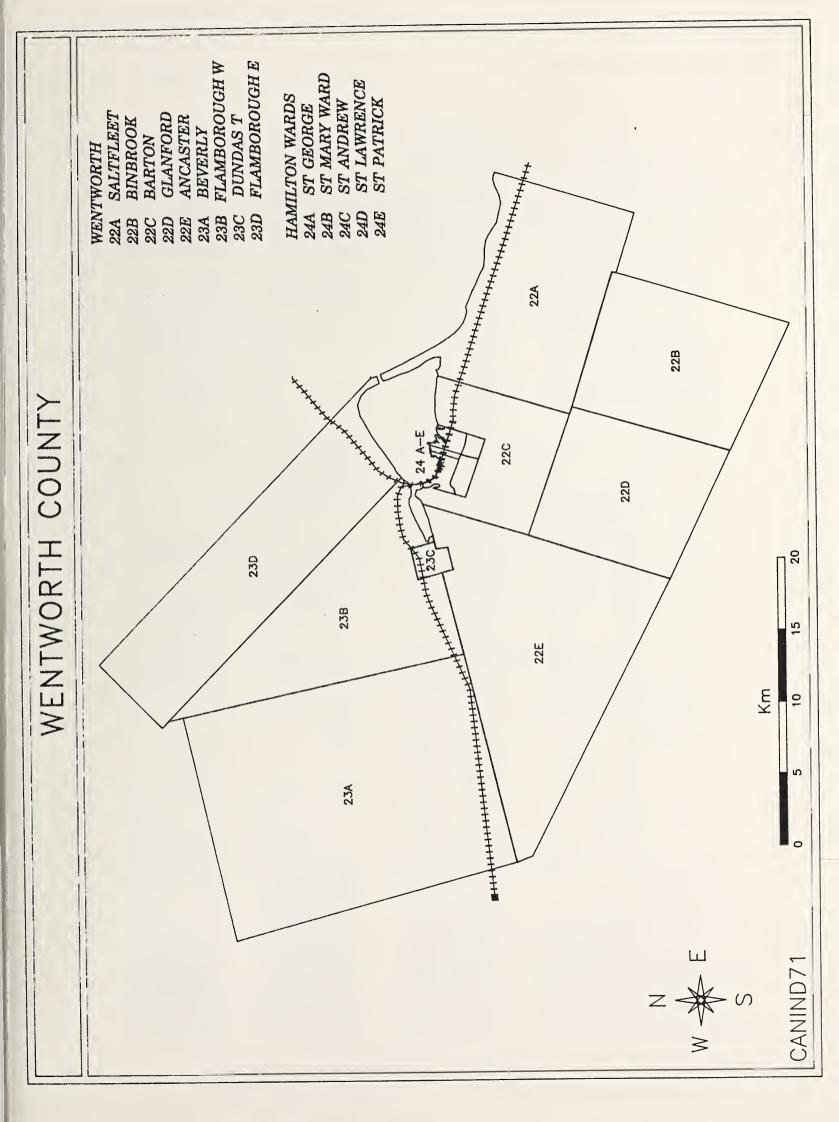
-- COUNTY-WELLINGTON ---

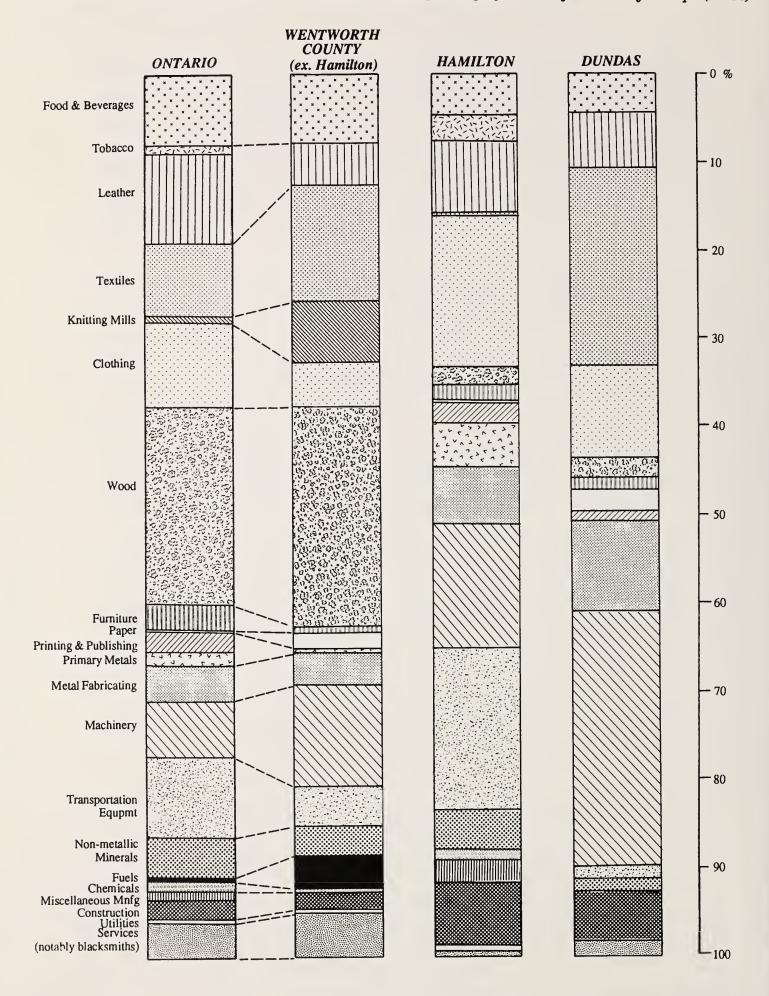
Wentworth County was part of the most maturely developed zone of southern Ontario by 1871, its rural population density at over 60 persons per square mile in 1871, being second only to York's. Wentworth was much more highly industrialized than most other parts of the province, all its measures being at least twice the provincial mean. Industrial activity was highly concentrated in Hamilton, the county seat and a major commercial city, and in the more specialized industrial town of Dundas. Hamilton and Dundas together accounted for 82 per cent of the county's industrial workers and 72 per cent of its gross value of industrial production. Of Hamilton's total population of 26,716 in 1871, 5,775 or more than one in five were employed in industrial mills, factories or workshops. Dundas had a similar proportion, with 683 of its 3,135 people working in industry.

The industrial structures of Wentworth County, Hamilton, Dundas and Ontario as a whole are compared in the diagram overpage, based on employment in major industry groups. Wentworth's structure reflects characteristically rural types of industry such as water-powered flour, saw and textile mills, as well as several distinctive enterprises making hosiery, paper and chemical products which employed at least 1.5 times their share in Ontario generally. Hamilton and Dundas illustrate more urban features and are remarkable for the strength of primary metals, metal fabricating, machinery and transportation equipment which between them employed about 40 per cent of the industrial workers in each place, about twice the level in all Ontario. Hamilton also had distinctive activity in tobacco and miscellaneous manufactures. In combining above-average industrial activity with a diversified industrial structure not dominated by any single sector or enterprise, Hamilton resembled Toronto, St Catharines and Peterborough. Dundas was like Brantford, Guelph, Brockville, Galt, Oshawa, Ingersoll and Paris in being both specialized and highly industrialized.

In contrast to the pattern in most counties, steam engines were far more important than waterwheels in powering industrial establishments in Wentworth County. Steam engines generated over 60 per cent of the industrial power used reported by enterprises that employed 54 per cent of industrial workers and 59 per cent of the value added in manufacturing. The Hamilton Rolling Mills reported the largest steam capacity in the county and indeed in all of Ontario, but most steam engines had capacities of under 40 horse power. Six enterprises ranked among Canada's industrial leaders in 1871, the top one per cent. These six were the Hamilton Rolling Mills, F.G. Beckett's engine and boiler works, the Sanford McInnes clothing business, John McPherson's shoe factory, the Wanzer sewing machine works and the Young Law cotton mill of Dundas. Three other Hamilton firms, the Great Western Railway shops, Gurney's foundry and the Wilson Bowman sewing machine works, and James Williams' oil refinery in Barton Township, were nearly as large in value of output.

Hamilton and Dundas were notable for larger workplaces. Over half of Wentworth's urban workers, compared with only one in three of urban workers across Ontario, laboured in large establishments with over 50 employees. Very large numbers of men and boys were employed in Hamilton's metal-working and engineering enterprises -- such as 983 men in the Great Western Railway shops. While two-thirds of Hamilton's male workers were counted in powered establishments, notably large factories, 85 per cent of female workers were in workplaces that used only manual power. Three in four of all women and girls in industry were employed in clothing establishments. The only employer in Hamilton-Wentworth with more than 50 female employees was Sanford McInnes, manufacturer of ready-made clothing, who reported 350 or 40 per cent of all Hamilton's female workers in 1871.





		OBSERV	A.	FORCE	H	FIXCAP	<u>-</u>	TOTEMP	<u>-</u>	SUMPROC	COC	VADD	
		SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- BNT	SUM	PERC-	MUS	PERC- ENT
COUNTY	SEC												
WENTWORTH	5.01	68	12.0	771	17.7	367400	14.2	383	4.9	2052114	22.9	522418	12.7
	5.02	7	0.9	18	0.4	30100	1.2	174	2.2	184114	2.1	57537	1.4
	5.04	85	11.5	54	1.2	190414	7.3	548	7.0	624123	6.9	275637	6.7
	5.05	32	4.3	275	6.3	295538	11.4	315	4.0	359346	4.0	161929	3.9
	5.06	4	0.5	52	1.2	27000	1.0	139	1.8	113202	1.3	41533	1.0
	5.07	77	10.4	30	0.7	259254	10.0	1113	14.2	857403	9.5	313113	7.6
	5.08	101	13.6	1601	36.7	166890	6.4	638	8.1	668712	7.4	374713	9.1
	5.09	21	2.8	49	1.1	25725	1.0	120	1.5	87570	1.0	60844	1.5
	5.1	5	0.7	160	3.7	27700	1.1	44	9.0	57900	9.0	38350	0.9
	5.11	11	1.5	23	0.5	51850	2.0	137	1.7	105000	1.2	64627	1.6
	5.12	4	0.5	430	9.9	72300	2.8	290	3.7	745400	8.3	307900	7.5
	5.13	34	4.6	222	5.1	240350	9.3	452	5.8	519913	5.8	332433	8.1
	5.14	30	4.0	435	10.0	356015	13.7	1063	13.5	1164641	13.0	716113	17.4
	5.15	26	7.6	16	0.4	43530	1.7	1168	14.9	112816	1.3	84174	2.0
	5.17	35	4.7	16	0.4	65483	2.5	333	4.2	209793	2.3	149684	3.6
	5.18	2	0.3	85	1.9	75000	2.9	84	1.1	420000	4.7	193000	4.7
	5.19	13	1.8	38	0.9	39400	1.5	58	0.7	109130	1.2	39280	1.0
	5.2	19	2.6	38	0.9	52150	2.0	155	2.0	176100	2.0	109479	2.7
	9	32	4.3	47	1.1	53110	2.0	475	0.9	301134	3.4	203075	4.9
5.07-a/1	7	1	0.1	•	•	125000	4.8	12	0.2	33854	0.4	21554	0.5
	8	3	0.4	٠	•	400	0.0	3	0.0	1300	0.0	607	0.0
	10	80	10.8	•	•	27825	1.1	148	1.9	76700	0.9	52419	1.3
ALL		741	100.00	4360	100.0	2592434	100.00	7852	100.0	8980265	100.0	4120419	100.0

-- COUNTY-WENTWORTH ---

Settled since the 1790s, York County was part of the most maturely developed heartland zone of southern Ontario by 1871. Its rural population density was the highest in the province. Just over half the total county population of nearly 116,000 lived in the City of Toronto or in the villages of Aurora, Newmarket, Holland Landing, or Yorkville. York County was much more highly industrialized than other parts of Ontario, its mean value of output per capita being well over twice the provincial mean. The county's industrial firms in 1871 included an enormous range in size and technology from modern railway workshops and rolling mills to small relics of early enterprises. Activity was highly concentrated in Toronto which accounted for 77 per cent of York County's industrial workers and nearly 80 per cent of its gross value of industrial production. Of Toronto's total population of 56,092 in 1871, 10,585 or nearly one in five were employed in industrial mills, factories or workshops.

The industrial structure of York County outside Toronto (see diagrams overpage) reflects characteristically rural types of industry such as water-powered flour, saw and textile mills but also has about twice the Ontario proportion in machinery industries. Toronto's structure shows relatively large shares of activity in tobacco, leather, clothing, furniture, printing and publishing, metal fabricating and miscellaneous manufactures.

In York County outside Toronto, waterwheels accounted for well over half the reported horse-power units and steam engines for only one third. By contrast, firms in the city were driven overwhelmingly by steam engines and powered enterprises employed well over half all industrial workers, reported nearly 90 per cent of the value of fixed capital invested in industry, and about two-thirds of both gross value of output and added value. Casimir Gzowski's rolling mill, for example, reported a 250-hp steam engine and \$500,000 worth of output. At the Gooderham and Worts distillery, a steam engine of 116 hp was used to produce nearly \$1.5 million of gross output and over \$1 million of added value, the highest values in Ontario for any industrial firm in 1871. Other large Toronto enterprises using steam engines and producing at least \$100,000 worth of output were: William Hamilton's foundry and machine shop, the Dickey Neill engine works and foundry, the Toronto Paper Manufactory, the Robert Hay Company's furniture factory, and the William Davies pork-packing business. John Abell in Vaughan Township combined the manufacture of agricultural machinery with a flour mill, using a 80-hp steam engine to produce nearly \$120,000 worth of output.

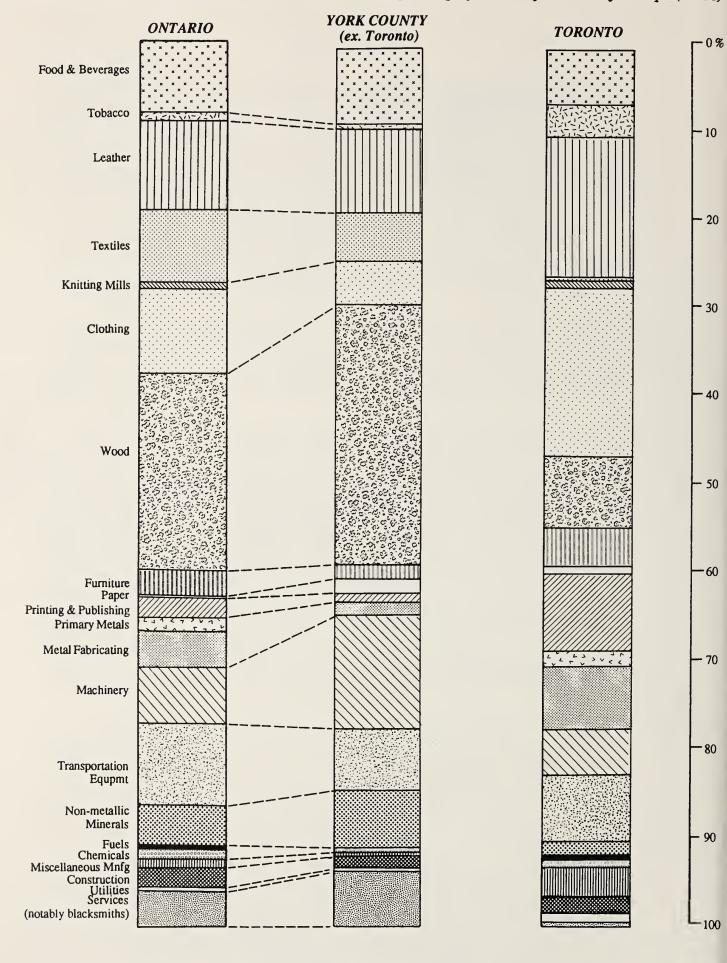
Toronto was distinctive for the number of large enterprises. Forty-seven businesses, with at least 50 employees each, employed nearly three in five industrial workers and produced over half the value added in manufacturing. Outside Toronto, York County had only five such large employers. Toronto had a much higher proportion (58 per cent) of its workers in larger workplaces of at least 50 employees, compared with under 33 per cent of all Ontario urban workers. Three of every four of these larger workplaces were powered by steam engines or waterwheels.

Large numbers of men and boys were employed in Toronto's metal-working and engineering enterprises. But women and girls formed 24 per cent of Toronto's industrial workforce, a share exceeded only by Montreal (34 per cent) and Quebec City (27 per cent) among the larger cities. While three in five of Toronto's male workers were counted in powered establishments, 62 per cent of female workers were in workplaces that used only manual power. Four of every five female industrial workers in Toronto were employed in clothing establishments, footwear factories, or the printing and publishing industry (12 per cent).

43F HOLLAND LANDING 43G GWILLIMBURY N 43E GWILLIMBURY E 45C SCARBOROUGH ST GEORGE 43D NEWMARKET V TORONTO WARDS ST JAMES ST DAVID 45B YORKVILLE V ST JOHN 43B WHITCHURCH 44A ETOBICOKE 43H GEORGINA X E 45D MARKHAM 43C AURORA V 44B VAUGHAN 44C YORK W 45A YORK E 43A KING 47B 47C 46B 46C 46D 47A YORK COUNTY WITH TORONTO 45C 43H 45D 45A 43B 43E 43D 436 44C 44B 43A

ST LAWRENCE ST ANDREW ST PATRICK 15 10 ည





		OBSERV	>.	FORCE	F64	FIXCAP	a,	TOTEMP	40	SUMPROC	Soc	VADD	
	renewa e	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC-	SUM	PERC- ENT	SUM	PERC-	SUM	PERC-
COUNTY	SEC						!						
YORK		ri	0.1	10	0.1	800	0.0	1	0.0	200	0.0	٠	•
	5.01	159	10.6	2367	30.7	1321200	10.8	957	7.0	6255453	32.3	2417455	26.7
	5.02	10	0.7	36	0.5	65100	0.5	372	2.7	345860	1.8	125982	1.4
	5.04	211	14.0	146	1.9	325131	2.7	2010	14.7	2110324	10.9	846108	9.3
	5.05	85	3.9	266	3.4	60699	0.5	194	1.4	322657	1.7	65023	0.7
	5.06		0.1	20	0.3	10000	0.1	77	9.0	20000	0.3	29000	0.3
	5.07	148	9.6	23	0.3	345100	2.8	2237	16.4	1915802	6.6	873638	9.6
	5.08	255	16.9	2944	38.2	432407	3,5	1749	12.8	1213207	6.3	560142	6.2
	5.09	35	2.3	080	1.0	441040	3.6	575	4.2	641612	3.3	231154	2.5
	5.1	8	0.5	181	2.3	102300	0.8	140	1.0	218500	1.1	115150	1.3
	5.11	25	1.7	94	1.1	403540	3.3	895	6.5	1381055	7.1	724687	8.0
	5.12	S	0.3	274	3.6	103480	0.8	215	1.6	512550	2.6	121062	1.3
	5.13	81	5.4	230	3.0	283600	2.3	811	5.9	996887	5.1	688332	7.6
	5.14	9	4.0	528	6.8	559820	4.6	978	7.2	1494050	7.7	1173213	12.9
	5.15	111	7.4	252	3.3	6698555	54.7	979	7.2	305831	1.6	202480	2.2
	5.17	58	3.9	109	1.4	76265	9.0	396	2.9	250730	1.3	167683	1.8
	5.18	2	0.1	12	0.2	2950	0.0	80	0.1	24250	0.1	16000	0.2
	5.19	17	1.1	80	1.0	69700	0.6	116	0.8	353686	1.8	97110	1.1
	5.2	53	3.5	52	0.7	160620	1.3	374	2.7	453214	2.3	287264	3.2
	9	41	2.7	6	0.1	26130	0.2	251	1.8	200165	1.0	126561	1.4
	7	2	0.1	10	0.1	700000	5.7	61	0.4	169000	0.9	91000	1.0
	8	10	0.7	1	0.0	6275	0.1	23	0.2	17090	0.1	7965	0.1
	10	155	10.3	•	•	48740	0.4	257	1.9	145517	0.8	102648	1.1
ALL		1506	100.01	7714	100.01	1.225E7	100.0	13676	100.0	1.938E7 100	100.0	.0 9069657 100.0	100.0

-- COUNTY-YORK ---

NORTHERN DISTRICTS

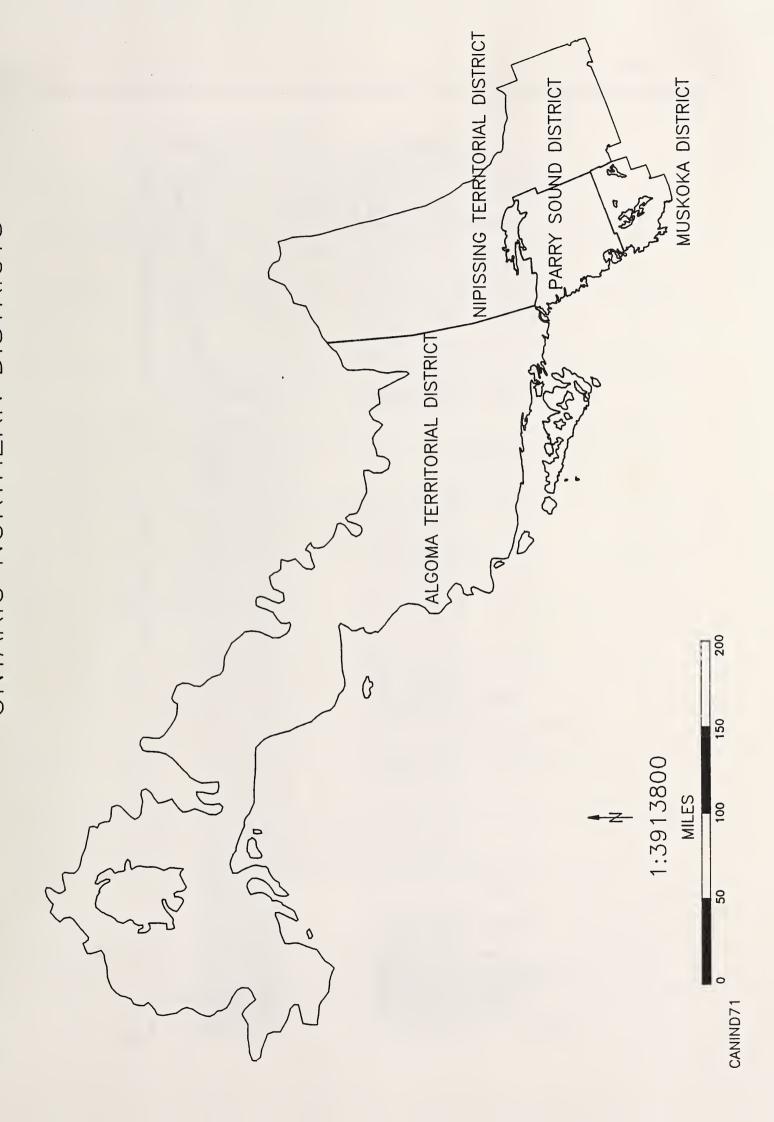
In 1871, northern Ontario was still virtually unsettled. Much less extensive than it would become later, northern Ontario's limits were defined by the watershed between the Great Lakes and Hudson Bay drainage systems. The enumerated population of 15,728 represented only 0.97 percent of the total Ontario population. Some districts had been defined by the time of the census, namely Muskoka and Parry Sound, but the distinctions between Algoma and Nipissing districts were still vague. District boundaries and the judicial administration in northern Ontario were not clarified until the late 1880s. While the settlement system of southern Ontario was well established, that of the north was still very rudimentary with no incorporated urban centres. Bruce Mines, with an estimated population of 1,250, was the largest place. Gravenhurst and Muskoka had populations around 400. Fort William, the most westerly settlement in the province, had an estimated population of only 70.

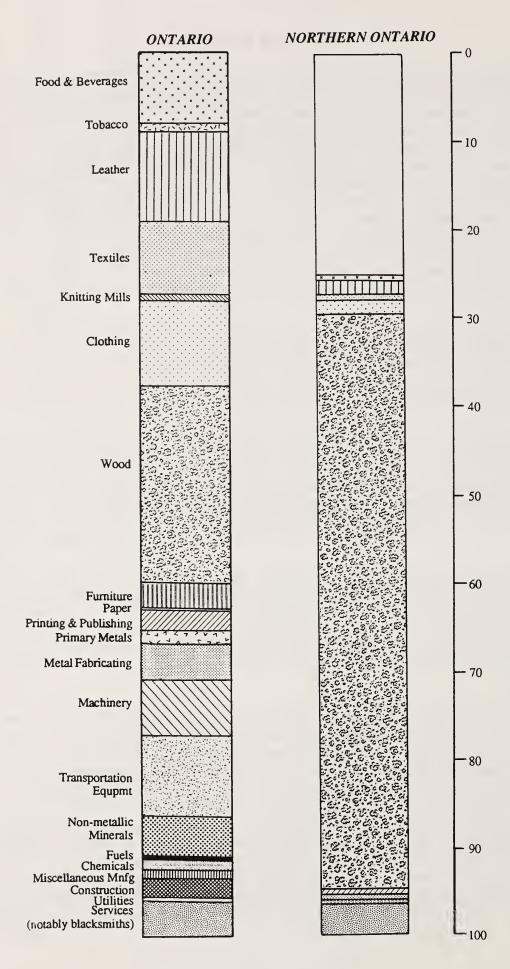
For census purposes, northern Ontario was organized into the eight Census Districts of Nipissing South, Nipissing North, Muskoka, Parry Sound, Manitoulin, Algoma East, Algoma Centre, and Algoma West. Unlike southern Ontario, Census Sub-Districts could not usually be defined in terms of municipal units such as townships and incorporated villages, towns and cities.

Not surprisingly, northern Ontario was less industrialized than other parts of the province, but the average scale of operations of the 91 industrial establishments was comparable. A mean value of industrial production per capita of \$30.55 compared with the Ontario mean of \$74.00. The average number of employees per industrial establishment was twice the provincial average and the mean output per establishment was \$5,273 compared with an average of \$5,516 across Ontario.

The industrial structure of the northern districts was very simple, completely dominated by wood processing (half the total establishments employing 65 per cent of the workers and producing 60 per cent of the value of output) or by mining (one enterprise accounting for one quarter of employment and output). Only the rural services (mainly blacksmiths) sector had about the same proportion in northern Ontario as the mean for the whole province.

As elsewhere in Ontario, most establishments were small craftshops. But nearly half the industrial workers reported in the northern districts were in larger enterprises. Three establishments employed more than 50 workers each. The largest enterprise in all of northern Ontario, West Canada Mining reported 167 men and 39 boys at Bruce Mines producing 19,300 tons of copper ore valued at \$128,500. Clarke and White's sawmill at Magnetawan in Parry Sound employed 100 men producing \$42,500 worth of lumber. J.W. Beatty and Co. operated a sawmill at The Sound employed 80 men and 8 boys producing \$30,000 worth of lumber, lath and shingles. Four other sawmills reported 40 to 47 workers each: the Magnetawan Lumber Company in Parry Sound and three in Algoma District — Chaffey and Fredenburgh at Spanish River, Robert A. Lynn and Co. in Manitoulin Centre, and Staples and Schulenburg at Killarney.





		OBSERV	I N	FORCE	38	FIXCAP	- A	TOTEMP	er er	SUMPROC	20	VADD	
		SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT	SUM	PERC- ENT
COUNTY	SEC												
NORTHERN	4	1	1.1	•	•	•	•	206	25.2	128500	26.8	•	•
Districts	5.01	4	4.4	25	3.3	12300	1.7	2	9.0	12340	2.6	2860	1.7
	5.04	9	9.9	٠	•	1680	0.2	13	1.6	7100	1.5	3890	2.3
	5.05	ī	1:1	•	•	7	0.0	ı	0.1	25	0.0	12	0.0
	5.07	9	9.9	٠		6050	0.9	18	2.2	23357	4.9	8922	5.3
	5.08	46	50.5	734	1.96	678535	95.9	532	65.1	289275	60.3	141656	83.5
	5.09		1:1	•	•	• • • • • • • • • • • • • • • • • • •	-	1	0.1	009	0.1	400	0.2
	5.11	H	1:1	٠	•	2000	0.3	4	0.5	2500	0.5	2000	1.2
	5.13	3	3.3	·	•	006	0.1	8	0.4	3300	0.7	1400	0.8
	5.17	2	2.2		٠	70	0.0	2	0.2	250	0.1	140	0.1
	10	20	22.0	·	•	5765	0.8	32	3.9	12598	2.6	8283	4.9
ALL		91	91 100.0	759	759 100.00	707307 100.0	100.00	817	817 100.0	479845 100.0	100.00	169563 100.0	100.0

-- COUNTY=NORTHERN DISTRICTS ---

1871
SUMMARY,
GEOGRAPHICAL
COUNTIES
ONTARIO

OBSERV	999 609 199 199 199	367	7 1 1 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	539	25 24 24 24 45 24 46 24 24 24 24 24 24 24 24 24 24 24 24 24
VADD	52250 927499 69606 62956 73311 34836 11595	1527668	1711 5915 32865 83266 19254 17885 31439 68016 17728 17787 114776 27240 31356	496521	297795 31066 28524 23380 54124 7555 77570 35870 124326 311015 311015 354886 354886
SUMPROC		3268335	7180 1180 1189 126384 405984 75953 75953 75953 75953 75953 75953 75953 75953 75953 75953 75953 75953 75953 75953	1141332	783045 112685 39690 39690 2058010 44075 13057 10845 172204 240750 63181 293622 31774 31172 593622 1994958
SUMRAWC	26900 911378 78139 72099 81269 8464 8536	1736267	5369 7754 49181 40178 16338 43426 143357 23310 20555 42813 117191 362223	619296	485250 81619 11166 1451676 21543 5492 5492 5492 163180 170848 11996 282607 1450132 239512
WAGES	20840 424752 23531 24504 28498 5936 6675	642856	1600 5116 11627 27906 5550 9823 10044 30720 6932 6875 6215 45903 4984	187869	155817 16341 17130 13570 18500 13043 3200 2720 2720 2720 2720 2720 2720 272
TOTEMP	1253 1253 126 154 147 37 35	2305	188 188 188 188 188 188 57 59	1186	604 98 71 58 69 70 113 133 145 145 1336 1336 1336
RMPBOY RMPGIRL	3. 112.	26		5	111 2 2 3 3 3 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
	58 33 33 10 10	102	11 13 13 14 18	61	26 2 1 1 1 2 3 3 3 3 1 10 15 15 15 15 16 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18
RMPWOM	164 4 7 20 1 109	311	1114896996	104	217 111 123 144 111 111 111 171 574
EMPMEN I	86 1013 119 142 116 32 33	1866	9 28 81 130 64 75 160 160 152 42 42 42	1016	350 92 68 68 57 48 114 1120 478 478 478 478 1297 3199
FLOCAP	9865 489010 29930 47405 30330 11300 9390	927930	1125 10390 25935 34519 37519 16015 23581 25697 9150 2450 130924 17615	231531	54481 15072 10130 20008 7502 2510 4075 52995 64070 114360 1169300 1169300 1169300
FIXCAP	34550 790935 55330 68650 44935 18215 8100	1206835	7400 5575 35590 66196 21655 21655 52095 76697 39550 79697 19990 12825	533643	181308 29880 11337 99560 39560 7280 6750 6750 17800 17922 65060 7050 1282775 264980
FORCE	225 442 179 226 136 74 288	1627	77 202 202 406 144 123 123 236 236 236 175 1159	2943	195 17 100 100 151 295 295 296 150 105 4132 4132 5591
COUNTY CSD	BRANT COUNTY BRANTFORD E BRANTFORD W BURFORD DUMFRIES S OAKLAND ONONDAGA: PARIS T	county subtotal	BRUCE COUNTY ALBEMARLE/ AMABEL AMABEL ARRAN BRAN BRAN BRUCE CULROSS ELDERSLIE GREENOCK HURON KINCARDINE T KINCARDINE T KINCARDINE V KINCARDINE V KINLOSS SAUGEEN SOUTHAMPTON	county subtotal	CARLETON COUNTY BY FITZROY GLOUCESTER GOULBURN GOWER N HUNTLEY MARCH MARLBOROUGH NEFEAN NECTORIA NELINGTON VICTORIA WELLINGTON VICTORIA
	B		<u>n</u>	. •	U

	OBSERV	33 33 33 4 12 8 7	506	22 23 23 23 23 24 20 20 20 20 20 20 20 20 20 20 20 20 20	370	114 117 110 110 123 133 133 133 1410
	VADD	47377 89560 30001 38987 98511 84460 180808 26260	705275	34618 2680 22915 101398 11500 4088 32299 12399 12398 117098	1332737	435 34644 113495 1141 57641 142060 1679 35568 22076 64233 64237 27845 27845 36891 140828 140828 18093 15809
	SUMPROC	96730 203251 89805 144697 190144 167005 338151 52160	1520752	140915 17979 48365 239344 18000 12660 70804 5215 1175353 140387 38360 71225 245294	2273604	1075 65400 260432 81720 180000 180000 2655 2355 98933 40644 2355 98933 40644 2355 98933 40644 2355 64256 52642 79057 79057 79057 79057 79057 79057 79057 79057 79057
	SUMRAWC	49353 113691 59804 105710 91383 81825 156823 25900	813987	106297 15299 25450 137946 6500 8178 38505 34214 285330 95039 6567 47241	948042	640 30736 146937 3259 24079 38000 1025 836 63365 18568 1087 34715 600 55768 39013 24797 42166 20200 180002 148269 325754 20163 71126
RY, 1871	WAGES	222789 41696 14350 12630 39661 74881 12695	303833	23072 3590 10531 35057 3589 16300 12560 16473 6250 6250	261867	217 14291 74508 700 2750 50000 660 10837 10837 10837 10837 10837 115195 15195 15195 146059 4310 8027
I. SUMMARY,	TOTEMP	122 224 67 70 188 163 293 272	1449	1110 32 65 213 36 46 65 10 167 82 24 24 24 25 25	1211	258 258 1113 1113 1113 1100 65 65 65 65 65 79 65 79 65 79 65 79 79 79 79 79 79 79 79 79 79 79 79 79
GROGRAPHICAL	RMPGIRL	•••	e	· · · · · · · · · · · · · · · · · · ·	13	
	EMPBOY	0 8 4 H 4 8 8 6 H H H H H H H H H H H H H H H H H	61	ш н н н н н н н н н н н н н н н н н н н	74	10 20 20 20 10 110 111 111 112 114 1177
COUNTIES	EMPWOH	1753381	137	32	73	11. 11. 11. 11. 11. 11. 11. 11. 11. 11.
ONTARIO	RMPMEN	115 208 59 67 167 150 209 45	1248	92 29 29 36 36 36 36 161 73 161 196	1051	233 233 233 81 175 175 175 70 70 70 70 70 70 70 70 70 70 70 70 70
	FLOCAP	43480 20161 3800 30320 50495 33902 112585 12623	386042	24606 560 6965 19464 4635 18380 18380 5050 5050 5050 5050 14613	338245	550 4056 49352 200 17450 1435 41269 5590 65000 65000 6702 5815 67500 67500 110680 75180 110680 75180 75180 75180 75180 75180 75180 75180 75180
	FIXCAP	40942 72575 24295 37570 57250 75650 65175 84380	481037	40850 6155 15305 53085 12000 6739 12095 12095 12095 18984 67320	377383	2025 19050 153995 1500 40000 2860 1250 34762 15610 34762 1400 70001 38005 22710 44000 14170 29860 98700 44000 16000 11140
	FORCE	25 4 4 4 5 5 5 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6	2624	148 52 235 235 100 100 116 82 92 92 92 91 91	1468	16 153 87 87 87 20 20 20 16 25 415 25 415 102 102 102 104 419 419 419 419 419 419 419 419 419 41
	COUNTY CSD	RIGIR COUNTY ALDBOROUGH BAYHAM DORCHESTER S DUNWICH MALAHIDE SOUTHWOLD SI THOMAS T VIENNA V YARMOUTH	county subtotal	AMHERSTBURG ANDERDON COLCHESTER GOSFIELD MAIDEN MALDEN MALDEN MERSEA PELEE ROCHESTER SANDWICH E SANDWICH T SANDWICH T SANDWICH T	county subtotal	BARRIE TP BARRIE TP BEDFORD CATARAQUI CLARENDON/ FRONTENAC GARDEN ISLAN HINCHINBROOK KENNEBEC KINGSTON TP LOUGHBOROUGH OLDEN ONTARIO ONTARIO ONTARIO ONTARIO SO PENITAND PORTIAND PORTIAND PORTIAND PORTIAND PORTIAND PORTIAND SYDENHAM VICTORIA

ONTARIO COUNTIES: GEOGRAPHICAL SUMMARY, 1871

	FIXCAP F 38705 55756 47600 23390 23390 23390 20780 20780 108937 1089	FLOCAP EMPHEN EMPHON EMPBOY EMPGIRL TOTEMP WAGES SUMRAWC	15160 63 8 6 77 6499 688 27421 121 10 1 132 33681 894 24609 135 6 9 150 23040 1413 4185 49 11 8 68 8847 418 2150 53 3 1 57 8352 498 3610 27 5 6 8847 418 418 4394 53 10 5 2 2495 55 55 4394 53 10 5 2 70 10010 782 3830 25 2 2 7 2840 782 1141 20 1 1 1 1 1 1 1982 13 3 11 2 149 26186 894 150 1184 20 4 1 1 1 1	357677 1358 168 85 17 1628 266405 1006714 122300 162 36 23 221 61893 87069 4000 29 7 1420 1142 4000 29 5353 8485 2625 28 4125 2470 500 8 1800 7200 29200 78 3 7 88 12770 143994 1292 22 1 23 2141 4412 17877 79 9 5 1 94 17075 349804 12830 70 1 2 1 7 349804 12835 90 3 12 1 35891 12207 128 8 1 36101 26434 53891 36101	229316 720 63 60 3 846 184680 7241 168978 386 26 63 475 130984 3405 84780 172 55 44 12 283 65368 2540 36680 105 17 5 127 38120 539 44902 161 13 10 2 186 31354 581 16570 243 27 20 1 290 71996 2906 82000 134 26 17 4 181 54056 711 26915 95 22 8 2 127 28993 421
--	--	--	--	---	---

	OBSERV		۲۵۲	3 6	7 4	· o	0	0 0	29	91	34	74	91	42	09	34	19	88	 835		57	26	81	0 0 1	71	21	46	E (8)	38	10	19	48	43	48	41	46	38	19	16	
	VADD O	0,0	1086	28552	427	4012	7777	75700	16857	50531	20021	14182	141965	50791	0538	113053	265	193886	 1320793	- 2	א מ	759	3 2	2438	4	35625	914	056	108	$\frac{212}{1}$	413	283	-45	888	56	S	977	67	982	
	SUMPROC		821665	1 0	1468	909	2 6		_	-	_	~1	1249	2591	5676	_	801		3032034	- 6	6938	275530	4897	9709	9300	-1	7916	63	23	6774	2	4916	5929	2214	45	3289	23	98	2	
	SUMRAWC		526/98	, "	777	ָ ט	יי	9 (42	891	697	694	270525	7511	5137	026	536	8	1711241		4892	177865	3099	2809	3	m i	3955	0	•	-	7068	052	987	62274	421	721	15077	6027	27	
KE, 1871	WAGES	1	1200	1001	1108	3150	20207	16667	10899	27323	15113	8410	68639	23544	48604	68976	2079	96888	632039		592	50382	3	182	398	569	4	309	4	N	745	0	181	180	055	N	4	4	7	
L SUMMARY,	TOTEMP		988	• 6	0 <	- "	110	6/1	78	151	63	96	350	106	278	281	29	550	3160		44	159	8	389	40	98	9	161	72	41	4	256	060	က	4	124	69	41	35	
GEOGRAPHICAL	BMPGIRL	ď	v o .	•	•	• ,-	- 4 U	n ·		7	•	•	•	•	•		•	• 🗝	18		• (~	• 1	m	•	•	•	4	•	•	•	•	•	•	m	7	•	•	•	
ES: CEO	EMPBOY	;	31	• a	0	•	• ٢	•	•	က	ស	'n	16		,	3.	, ,	85	201		•	Φ.		46	m	7		15	4	m	4		10	m	7	13		4	m	0 0 0
COUNTIES	ВМРМОМ		109	• •	۲ <u>-</u>	4 C	7 90	9	37	39	7	44	48	2.2	1 5		0	37	426		7	တ	•	33	9	-	4	=======================================	-	က	m	43	ហ	7	00	4	m	-	7	
ONTARIO	EMPMEN I		743		9 0	4 5	٦ ,	131	4	102	S	49	286	(C)	V	243	* -	427	2515		42	140	82	307	31	83	98	131	67	35	41	193	75	129	125	105	63	36	30	
	FLOCAP		171719	001	CCCT7	0 C	070	24150	1355	14308	10655	2348	202935		113750	177105	CCTIIT	222946	986926		9558	64700	18815	129616	27600	30575	20330	31968	6020	20750	4950	129090	15186	20232	29030	37003	5374	2830	5950	
	FIXCAP		285870	007	33/36	9767	0860	40686	10034	25895	22446	7148	84238	26148	142575	7007	12201	139686	908849		38975	113300	93560	231210	26170	64780	41745	68918	33633	17771	32200	129100	31270	44765	65190	53260	16600	11336	18150	
	FORCE		645	• 6	322	00	•	282	15	154	248	144	574	110	715	701	0 0	C71			329	274	193	561	9/	227	348	405	296	109	177	183	233	262	128	244	. (r)	78	112	
	COUNTY CSD		BELLEVILLE T	CAKLOW/MAIO	ELZEVIK/	FARADAI	HERSCHEL/	HUNGERFORD	HUNTINGDON	MADOC	MARMORA/LAKE	RAWDON	VENUEN	TOUT TO		11 NOHNEGE	TIMENTON A	TVENDINAGA	county subtotal	HUROM COUNTY	ASHFIELD	CLINTON V	COLBORNE		GODERICH IP	GREY	HAY	HOWICK	HULLETT	MCKILLOP	MORRIS	SEAFORTH V	STANLEY	STEPHEN	THUCKERSMITH	THRUBERRY	IISBORNE	WAWANOSH E		

1871	
SUMMARY,	
GROGRAPHICAL	
COUNTIES	
ONTARIO (

TOWER TO THE PLOCAD PHONIS RAPON RATES TATES TO THE WARS THE PROPERTY TO THE WASTE THE WARS THE WASTE THE WARS THE WARS THE WARS THE WASTE TH					
COUNTY C	OBSERV		וש שה שמטטששו	の 44 10 222000477274	619
TOTAL CED COUNTY COUNTY COUNTY COUNTY COUNTY COUNTY CHATCH T 2138 34975 20975 175 14 11 1 198 158405 CHATCH T 2138 34975 20975 175 14 11 1 198 158405 CHATCH T 2138 34975 20975 175 14 11 1 198 158405 CHATCH T 2138 34975 20975 175 14 11 1 198 158405 CHATCH T 2138 34975 20975 175 14 11 1 11 11 11 11 11 11 11 11 11 11 1		5412 0096 0096 1932 3036 140 5944 595 597 791	90275 90275 9454 22144 22144 4038 4038 36118 10407 23001 2168	20017 1450 1450 14873 14873 14873 1836 666 666 6789 1836 1836 1836 1177 1717 1717 1717	1171198
TOTAL CED COUNTY COU	SUMPROC	0952 6375 3271 3748 8971 7027 7027 2474 1107	17383 6270 6270 3498 72416 74959 7562 7562 7562 7562 7562 7562 7562 7562	06011 64490 27388 2250 2488 36230 436 11947 10161 117724 117724 117724 117724 119897 19897 19897 19897 19897 19897	2895949
CAMPRING CHAPTER T 3 34975 2016 2 2 2 2 2 2 2 2 2	SUMRAWC	5540 6234 7989 0670 0670 1951 1951 177 177 177	7658 3354 1880 30733 30733 7053 7053 13078 13689 1088 6830	43522 43522 17428 1895 21357 207 6898 5803 5803 10935 112899 112899 1578 1578 1578	1713300
COUNTY COUNTY	WAGES	1989 4568 3764 1146 1146 2699 1931 454 849 339	4551 4551 4561 4561 4561 4561 4561 4561	8208 3257 3257 3203 3203 3303 3303 3303 3303 3303 330	563807
COUNTY COUNTY COUNTY CAMERY CAMERY	TOTEMP	のののなててらてのころこ	18 18 18 2 2 5 2 5 2 5 6 6 6 6 6 6 6 6 6 6 6 6 6	20 20 33 33 33 33 34 10 32 32 33 33 33 33 33 33 33 33 34 34 34 34 34	2670
COUNTY BOTHWELL T 138 34975 20975 75 BOTHWELL T 297 42100 102454 169 CHATHAM TP 273 63820 43670 647 CHATHAM TP 273 13045 6150 647 CHATHAM TP 273 13045 43979 152 HARWICH 288 49875 43979 152 HARWICH 288 49875 43979 152 HARWICH 288 49875 43979 152 CHATHAM TP 273 3045 6150 647 HARWICH 288 49875 43979 152 HARWICH 288 49875 43979 152 CHATHAM TP 273 3045 6150 647 HARWICH 288 49875 43979 152 CHATHAM TP 273 13045 6150 615 HARWICH 288 49875 43979 152 CONE COUNTY BOSANQUET 350 102795 26475 165 BOSANQUET 350 102795 26475 165 BOSANQUET 350 102795 26475 165 BOSANGUET 350 11265 166 ALMONTE V 334 80630 62332 120 CANLETON FLA 280 32989 20865 81 BATHURST 574 116147 275 107235 816 BUNGESS N 10 130 12055 65850 279 CANLETON FLA 42910 20120 648 BATHURST P 56 14074 46955 256 LANARK V 56 7473 289 2897 LANARK TP 56 7473 2897 LANARK TP 56 7473 139 BOSANGUET 14 11783 53468 2892 LANARK TP 56 7473 130 BOSANGUET 14 11783 53468 2897 LANARK TP 56 7473 130 BOSANGUET 14 11783 130 BOSANGUET 14 11783 130 BOSANGUET 17 17 1179 BONTAGUET 17 1178 BOSANGUET 17 1178 BOSANG					64
COUNTY BOTHWELL T 138 34975 20975 75 BOTHWELL T 297 42100 102454 169 CHATHAM TP 273 63820 43670 647 CHATHAM TP 273 13045 6150 647 CHATHAM TP 273 13045 43979 152 HARWICH 288 49875 43979 152 HARWICH 288 49875 43979 152 HARWICH 288 49875 43979 152 CHATHAM TP 273 3045 6150 647 HARWICH 288 49875 43979 152 HARWICH 288 49875 43979 152 CHATHAM TP 273 3045 6150 647 HARWICH 288 49875 43979 152 CHATHAM TP 273 13045 6150 615 HARWICH 288 49875 43979 152 CONE COUNTY BOSANQUET 350 102795 26475 165 BOSANQUET 350 102795 26475 165 BOSANQUET 350 102795 26475 165 BOSANGUET 350 11265 166 ALMONTE V 334 80630 62332 120 CANLETON FLA 280 32989 20865 81 BATHURST 574 116147 275 107235 816 BUNGESS N 10 130 12055 65850 279 CANLETON FLA 42910 20120 648 BATHURST P 56 14074 46955 256 LANARK V 56 7473 289 2897 LANARK TP 56 7473 2897 LANARK TP 56 7473 139 BOSANGUET 14 11783 53468 2892 LANARK TP 56 7473 130 BOSANGUET 14 11783 53468 2897 LANARK TP 56 7473 130 BOSANGUET 14 11783 130 BOSANGUET 14 11783 130 BOSANGUET 17 17 1179 BONTAGUET 17 1178 BOSANGUET 17 1178 BOSANG	EMPBOY		1		195
COUNTY BOTHWELL T 138 34975 20975 75 BOTHWELL T 297 42100 102454 169 CHATHAM TP 273 63820 43670 647 CHATHAM TP 273 13045 6150 647 CHATHAM TP 273 13045 43979 152 HARWICH 288 49875 43979 152 HARWICH 288 49875 43979 152 HARWICH 288 49875 43979 152 CHATHAM TP 273 3045 6150 647 HARWICH 288 49875 43979 152 HARWICH 288 49875 43979 152 CHATHAM TP 273 3045 6150 647 HARWICH 288 49875 43979 152 CHATHAM TP 273 13045 6150 615 HARWICH 288 49875 43979 152 CONE COUNTY BOSANQUET 350 102795 26475 165 BOSANQUET 350 102795 26475 165 BOSANQUET 350 102795 26475 165 BOSANGUET 350 11265 166 ALMONTE V 334 80630 62332 120 CANLETON FLA 280 32989 20865 81 BATHURST 574 116147 275 107235 816 BUNGESS N 10 130 12055 65850 279 CANLETON FLA 42910 20120 648 BATHURST P 56 14074 46955 256 LANARK V 56 7473 289 2897 LANARK TP 56 7473 2897 LANARK TP 56 7473 139 BOSANGUET 14 11783 53468 2892 LANARK TP 56 7473 130 BOSANGUET 14 11783 53468 2897 LANARK TP 56 7473 130 BOSANGUET 14 11783 130 BOSANGUET 14 11783 130 BOSANGUET 17 17 1179 BONTAGUET 17 1178 BOSANGUET 17 1178 BOSANG	MPWOM			H C H C	462
COUNTY COUNTY CAMDEN W CHATHAM T CONE COUNTY C	MPMEN	► 64 € 60 € 60 € 10 € 1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	03 11 10 10 10 10 10 10 10 10 10 10 10 10	1949
COUNTY BOTHWELL T BOTHWELL T CAMDEN W CHATHAM TP CHATHAM TP CONTER HARWICH HARWICH CONFERENCE SEE TILBURY B TILBURY B TONE TILBURY B TONE TONE TONE TONE TONE TONE TONE TONE	FLOCAP	20975 102454 3747454 43600 6150 43979 20861 28547 10580 5468	26475 3560 11460 62332 151815 62332 92715 19677	418234 102235 102235 5000 6536 66850 1225 20120 9705 2897 9705 2897 1779 1779 1779 1779 1779 1779 1779 1	844153
COUNTY BOTHWELL T CAMTHAM T CAMTHAM T CHATHAM T CHATHAM T CHATHAM T CHATHAM T CHATHAM T CONFORD RALEIGH ROWNEY TILBURY E ZONE TILBURY E ZONE BOSANGUET BROOKE DAWN ENVISKILLEN ENUFERIA HOORE DAWN ENVISKILLEN ENUFERIA T SOMBRA WARWICK T SARNIA TP SOMBRA WARWICK T SARNIA TP SOMBRA WARWICK T ENTROLIA V PLYMPTON SARNIA TP SARNIA TP SOMBRA WARWICK T TAMARK TP LANARK TP	FIXCAP	34975 42100 634890 634890 13045 49875 26200 6985 4503 11566	591701 102795 8440 2901 7200 1500 1500 1500 1700 1700 1700 1700 17	533628 326051 116147 3500 11205 109250 2910 29530 7473 7622 14970 65343 119147 55469 7831	1136331
K ti g ti ji	FORCE	13 2724 2724 320 320 13 13	2210 2210 110 20 27 27 283 118 118 158 334 158	1783 530 530 130 140 140 140 451	3481
	COUNTY CSD	HWELL DEN W THAM THAM ER WICH WICH ORD ORD ORD		TE VITE VITE VITE VITE VITE VITE VITE VI	county subtotal

VADD OBSERV 234833 25782 42171 29970 11855070 112770 112770 301785 301785 301785 44166 63528 63528 63528 131319 13133 1677 14055 86656 875 56710 33515 260 20578 46580 24913 90664 129477 129477 85809 85809 271647 20964 37188 586570 86625 58176 112864 199439 92615 477029 40605 2660 20055 190159 117038 56572 56572 56572 513900 1122800 SUMPROC SUMRAWC 55331 122652 42717 42717 33438 33438 13467 13467 13467 13467 22668 282835 5335 6335 67798 135911 983 6000 103253 1945 60268 23057 680 307714 70049 72455 74327 76439 62068 29289 56212 15645 145988 22484 16919 16919 44350 53507 4528 113860 2010 2010 2010 14163 20088 45637 17510 101888 13316 WAGES 925 6145 6145 335 21766 7402 426 85912 23361 19366 1159 229 86 1108 81 82 81 82 82 84 81 95 95 1187 1187 1187 1187 85 85 86 86 11 45 249 249 128 128 383 383 383 383 55 FLOCAP EMPMEN EMPWOM EMPBOY EMPGIRL TOTEMP 11 36 207 207 101 42 91 131 50 6263 6263 61825 61825 146155 120884 55092 6483 2498 133585 8720 5730 21124 77500 177500 177500 22122 24045 39490 24882 950 245 4627 48420 198 17500 15876 33535 1105629 117338 44425 144425 190911 11580 10394 207200 207200 3205 39445 FIXCAP 1701 14065 76088 2850 65528 FORCE 80 124 50 35 514 531 489 GRENVILLE COUNTY BASTAND/BURG BROCKVILLE C BROCKVILLE E BROCKVILLE W LERNOL-ADDINGTON
ADOLPHUSTOWN
AMHERST ISLA
BATH V GOWER S
KEMPTVILLE V
KITLEY
LEEDS/LANSDO
HERRICKVILLE
OXFORD TP
PRESCOTT T
WOLFORD ELMSLEY ESCOTT FRONT GANANOQUE V CAMDEN E
DENBIGH/...
ERNESTOWN
FREDERICKSBU
KALADAR/...
NAPANEE T
NEWBURGH V
RICHMOND TP ELIZABETHTOW YONGE / ESCOTT BROCKVILLE BROCKVILLE BROCKVILLE CROSBY N EDWARDSBURG SHEFFIELD county subtotal subtotal AUGUSTA COUNTY CSD county LEEDS-

ONTARIO COUNTIES: GEOGRAPHICAL SUMMARY, 1871

ONTARIO COUNTIES: GEOGRAPHICAL SUMMARY, 1871

OBSERV	0171644100 I	451	21 120 123 123 123 124 124 125 133 133 134 144 144 144 144 144 144 144	246 27 27 51 54 54 53 389
VADD	1141 803 9614 1664 40062 4855 2393 1437 7514 85633	1557501	24575 72508 54610 13284 32508 52993 1003138 50210 13522 30606 10310 234218 241827 163192 241827 163192 241827 163192 241827 163192 3192 3192 3192 3192 3192 3192 3192	111584 14302 49102 113534 89801 54516 109339 61786
SUMPROC	2867, 2107, 17821, 4408, 72374, 10799, 5611, 6510, 13307, 815,	3943224	73520 188983 136470 24987 88508 103402 71774 2193069 106263 67858 55100 742919 659590 981799 703475 410430 56000 56000 59534 179705 40865 187350	236438 40142 135447 202855 232371 94739 207788 181449
SUMRAWC	1705 1304 1304 2381 2381 5983 3217 5073 5189 1856	2373958	48945 113020 81860 9653 49000 50409 1189931 54202 26394 26396 450931 31900 31900 31900 31900 461648 27059 27	124854 25840 86341 89321 145170 40223 98449 119663
WAGES	343 496 4131 616 2573 3021 932 220 220 438 4874	701841	8116 24549 24199 6255 16454 156454 156454 19258 111120 112120 1119520 113650 61892 61892 61892 6281 6281 1190187	36146 7457 20548 58906 38061 27482 54784 54784
TOTEMP	1104299	2740	75 135 135 112 59 94 96 101 137 137 77 703 424 424 424 424 224 224 224 224 224 22	172 46 123 212 212 166 124 231 113
EMPGIRL	9 7 1	100	.228	
EMPBOY	1 8 7	195	23 23 23 24 25 25 25 26 26 37 27 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	12 13 13 14 15 15
EMPWOM	1 91 112 2	391	1 16 16 17 17 18 20 20 33 35 69 69 110 53 110 53 490	22 24 2 4 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
EMPMEN 1	10218	2054	68 111 88 88 77 77 78 75 63 111 111 56 63 333 348 333 22 213 22 213 22 448 348 348 348 348 348 348 348 348 348	157 43 112 171 160 114 213 101
FLOCAP	4945 8850 51836 237845 237845 12727 12727 42650 688652	1080100	8450 50625 15265 10290 6470 16395 278362 18932 18100 18232 18100 14275 18377 1400 183770 30000 183770 30000 13110 49360 5340	71346 4882 28983 51570 41887 36996 150865 32870
FIXCAP	14490 3075 40023 14880 433895 42505 17167 7885 29815 506340	1111175	17030 45563 32840 17450 32516 23516 432185 36383 32715 33220 13375 154150 228600 153324 342100 160200 160200 50040 50040 50040 50040 50040 50040	78535 12745 43398 66705 76110 39600 58275 56065
FORCE	401 174 100 963 207 207 97 60 40 988	3016	137 142 200 200 76 125 227 618 141 141 127 127 103 103 104 104 107 107 107 107 107 107 107 107 107 107	345 135 135 395 126 326 582 272 272
COUNTY CSD	LINCOLM COUNTY CAISTOR CAISTOR CENTRE WARD CLINTON TP GAINSBOROUGH GRANTHAM GRIMSBY TP LOUTH NIAGARA TP PORT DALHOUS ST CATHARINE WEST WARD	county subtotal	MIDDIASEX COUNTY ADELAIDE BIDDULPH CARADOC DELAWARE DORCHESTER N EXFRID LOBO LONDON TP MCGILLIVRAY MCGILLIVRAY METCALFE MOSA NISSOURI W STRATHROY V WARD NO 1 WARD NO 2 WARD NO 2 WARD NO 5 WARD NO 5 WARD NO 6 WARD NO 7 WARD NO 6 WARD NO 6 WARD NO 7 WARD NO 6 WARD NO 7 WARD NO 6 WARD NO 7 WARD NO 7 WARD NO 6 WARD NO 7 WARD NO	MORFOLK COUMTY CHARLOTTEVIL HOUGHTON MIDDLETON SIMCOR T TOWNSEND WALSINGHAM WINDHAM WOODHOUSE county subtotal

					OSTEARIO	COUNTY	RS1 GRO	GRAPHIC	OSTARIO COUNTIES: GROGRAPHICAL SUMMARY,	IZ, 1871				
COUNTY CSD	qs	FORCE	FIXCAP	FLOCAP	EMPMEN	EMPWOM	EMPBOY	EMPGIRL	TOTEMP	WAGES	SUMRAWC	SUMPROC	VADD 0	OBSERV
MORTHUMBE	NORTHUMBERLAND-DURHAM COUNTY	COURTY	:	6	ć		•		;	40.5				;
₹ 8	ALMWICK	26	12224	110100	23	٠.	4 0	•	77	118170	11500	107	20706	13
ă B	BRIGHTON TP	333	23895	8717	# KS	d +-1	7	• •	693	17935	8149	122590	41098	44
BE		35	12990	8654	သ	•	m	•	61	ന	S	625	27442	27
ฮ	CARTWRIGHT	157	24819	25568	55	6 0	7	9	64	9717	39414	99699	55	31
ฮ	CAVAN	453	91752	20421	~	ri	21	H	208	N	110487	996	ന	101
ប		480	89355	91321	173	17	17	•	207	37	239122	396	9988	94
ຽ	_	268	285850	227060	360	82	43	17	502	126759	411989	647575	234686	87
ಕ	COLBORNE V	79	19915	19895	-			eri :	86	0	34780	638	29082	35
ย	CRAMAHE	392	47959	19130	117	13	1	7	143	ا صراً	82708	219	38620	71
70	DARLINGTON	376	63515	65825	2		♥ (7	m i	σ,	\$ ·	215	7728	70
24		549	87816	41510	136	ın ı	on (• (150	31640	141399	286182	144783	69
H	HAMILTON TP	572	347819	297234	-		30	7	າງ (\supset (9 9	213	154434	19
H	НОРЕ	629	86593	38813	151	18	14	•	20 (m (97567	168046	65522	40
E		495	49729	26467	80	4	7	•	109	\circ	62317	9	42751	57
¥	MONAGHAN S	7	3120	2675	17	rd (r-t :	•	61	4496	1929	06	7146	g) (
토		234	39011	7578	9			•	6	ω,	35322	612	25793	36
Ë	NEWCASTLE V	97	36650	84775	マ	e S		₹ .	194	₹ .	024	535	873	30
PE		323	70203	72467	139	47	22	36	41	42	72	ぜ(8431	69
X	PORT HOPE T	363	264450	154970	9	144			570	e-4 '	22	732	051	77
-	SEYMOUR	180	51585	45395	130	ဗ		₹	184	o	196	ທ	432	69
county su	subtotal	6356	1836830	1380407	3218	534	252	80	4084	891493	3039379	5025662	1951466	1210
ONTEARIO CC	COUNTY													
BF	BROCK	323	90825	48855	174	12	ထ	Ħ	195	31420	112299	~	79240	82
M		84	58255	1195	43	ന	7	• (48	529	20494	3520	147	19
20	OSHAWA I	274	379450	685600	624	99	40	~	732	259350	612776	0606	478129	42
<u>a</u> :	PICKERING	716	153846	146773	250	27	30	1	308	315	7769	444911	672	132
3 6	KAMA	700	72300	50290	0 1	. ?	7 00	• 11	0 / 4	108640	15005	- 0	30910	4 6
2 6	REACH	1 00	128171	140001	70%	# 7	0 7	ח ני	4 CC	1007	2006	4447	2 A A	071
S	SCUGOG	9	476	573	. 00	1 e-4) •	5	, ~	753	159	; œ	0
Ë	THORAH	96	21395	19300	53	7	•	• •	55	271	422	88955	47	22
Š	UXBRIDGE TP	969	98815	50167	201	ø	19	ന	229	906	3478	482	135	57
WE		339	97850	93112	132	13	11	7	9	292	8784	3105	32	38
EW.	WHITBY W	82 350	134400 78773	85085 98830	205 127	30	10	• m	244 146	86249 38017	104374	251990 373405	4	50 50
			-			j (1							1 4
county su	subtotal	3748	1331439	1431178	2426	194	163	22	2805	731941	1974013	3549818	1575555	663

ONTARIO COUNTIES: GEOGRAPHICAL SUMMARY, 1871

ERV	22 22 27 27 27 27 27 27 27 27	17 74791191	55 20 20 31 32 33 33 33 34 34 36 36 37 37 37 38
VADD OBSERV	000000000000000000000000000000000000000	9	w w
VADI	22359 157847 144279 132030 390061 25989 73797 73797 75220 196133 31529	8 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8	624728 18035 22849 31206 13616 42374 42374 17336 174336 174036 1106 1106 309199
SUMPROC	55233 397268 354425 168861 102081 203312 151407 527407 527407 194526 104466	619 070 070 070 070 070 070 070 070	1655755 1655755 68655 68652 137180 117343 117705 23883 50576 131405 147168 462136 738506 738506
SUMRAWC	32874 239421 210146 36831 466294 76092 129515 85782 26731 27600 119306 307322 82097	1914088 124662 229479 80155 200466 55887 5041	33215 45806 35621 24104 69969 61450 61450 61450 61450 61450 6104 27889 207829 86062 273640 409107 12913
WAGES	9551 63244 60678 17109 194917 15909 37931 37931 16715 23263 113700 15962	3261 3261 3261 3264 3366 6779	219795 7924 12474 10346 12680 19926 21765 7969 6840 29178 10347 75946 13070 90479 128782 4040
TOTEMP	3177 251 251 251 73 60 104 1124 124 124 124	100 40044001	1152 44 511 96 121 121 144 47 444 78 403 544 544 544 544 544 544 544 544 544 54
EMPGIRL	·6		37
RMPBOY	14 11 12 22 22 7	111 159 159	100 3 3 1 1 1 1 1 2 2 2 4 3 6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7
MPWOM	0 0 0 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	216 10 29 10 5 5	117 4 4 6 6 6 6 6 6 11 11 11 11 11 11 11 11 11
EMPHEN EMPWOM RMPBOY	36 265 214 214 58 547 59 1154 1102 62	2294 122 247 139 139 25 206	898 36 48 49 90 121 37 37 37 37 227 72 72 72 72 72 72 72 72 72 72 72 7
FLOCAP	15555 82778 34879 15715 355000 29476 44762 11935 11935 125427 19609	32540 131070 20487 37348 24685 313819	28395 11200 11055 110460 36250 36250 36250 55065 9100 26520 91750 172945 17294
FIXCAP	22960 111678 86820 28470 330650 28700 42755 63815 18152 30236 54538 160625 34806	1052910 53949 112365 56049 62405 17659 6760	611197 20090 31230 27265 36150 67925 98485 6340 15280 82650 22622 96610 124220 124220 124220
FORCE	70 541 315 63 430 77 77 63 454 55 510 335 118	3030 236 236 431 298 53	1562 37 106 190 245 245 235 235 137 137 176 187 289 289 241
COUNTY CSD	DOLFORD COUNTY BLANDFORD BLENHEIM DEREHAM EMBRO V INGERSOLL T NISSOURI E NORWICH N NORWICH S OXFORD E OXFORD W	PEEL COUNTY ALBION BRAMPTON V CALEDON CHINGUACOUSY STREETSVILLE TORONTO GORE TORONTO TP	ERTH COUNTY BLANCHARD BOWNIE EASTHOPE N EASTHOPE S ELLICE ELLICE ELMA FULLARTON HIBBERT LISTOWEL V LOGAN MITCHELL V MORNINGTON ST MARYS T STRATFORD T WALLACE
8	CX C		PRRTH

BSERV	11 21 21 21 30 44 44 44 30 30 11	368	114 1 14 1 18 1 18 1 18 1 18	299	78 33 33 16 17 18 18	291
VADD OBSERV	44622 79546 3567 1000 62490 15988 3235 3235 76600 4200 4200 413833 77668 7000	825438	16218 4602 3000 14481 24388 24388 24377 186011 37779 70076	432222	65258 8902 27620 21519 8743 12820 152628 26553	343706
SUMPROC	129392 214495 7735 2000 142519 37355 5040 157600 6400 88036 811365 266702 266702	1883429	29243 18440 15000 34884 48999 49726 673315 100325 46340 170895	1264647	185756 23965 70892 90460 41966 32875 269344 91090	836953
SUMRAWC	84770 134949 4168 1000 80029 18967 1805 4172 81000 2200 1600 53707 394732 188528 400	1052217	13025 13025 12000 20403 25489 487548 62546 62546 6065 100819	832345	118606 8913 40072 67941 32237 19355 116716 8442	476819
WAGES	19733 37922 2045 5045 5000 24780 9008 2000 3175 2125 17212 45780 45780 200	413813	4878 1932 1500 7796 12086 8575 83591 15172 8455 37686	157271	33112 5217 12290 11691 4343 5850 77064 14100	172525
TOTEMP	189 189 154 112 118 119 109 161 161	1782	45 17 24 136 301 82 174 32	985	160 45 73 32 32 319 319	822
EMPWOM EMPBOY EMPGIRL TOTEMP	mmv •m • • • • • • • • • • • • • • • • •	24	••••লবাংল ••••	8	• • • • • • • • •	4
EMPBOY	21 22 21 24 24 24 24 24 24 24 24 24 24 24 24 24	117	10 7 7 7 10 45 8	06	11 144 · · · · · · · · · · · · · · · · · ·	28
ЕМРМОМ	211. 211. 211. 211. 21. 21. 21. 21. 21.	166	2 111 2 2 4 2 4 4 2 4 4 4 4 4 4 4 4 4 4	110	11 95. • 53	121
EMPMEN	59 151 103 103 104 115 115 1174 1174 1174 1174	1475	26 24 42 42 85 229 759 155 155	777	134 660 660 322 339 600 37	699
FLOCAP	24620 41430 1000 16792 2973 1730 2560 97700 2280 238390 110972 200	557490	1339 1201 6000 23240 15610 4627 10069 10069 53116 29610	1161752	115245 3610 3610 3201 3995 4215 56015 5250	207441
FIXCAP	71750 63020 5269 1000 35135 10114 4400 11650 51700 1175 1175 1175 1175 64629 500 400	653153	18813 3459 10000 21030 19265 145150 25865 26915 28649	361695	49696 47800 25825 10705 10810 93690 54350	312101
FORCE	167 246 113 206 170 108 397 220 220 299	2354	25 35 200 200 90 145 175 175 175 173 208	3617	189 274 274 68 95 105 76 221	1164
COUNTY CSD	PETERBOROUGH COUNTY ASHBURNHAM V ASHBURNHAM V ASPHODEL BELMONT/METH CHANDOS/ DOURO DUMMER ENNISMORE GUILFORD/ HARVEY MINDEN MONAGHAN N OTONABEE PETERBOROUGH SMITH SNOWDEN/ STANHOPE/	county subtotal	PRESCOTT-RUSSELL COUNTY ALFRED CALEDONIA CAMBRIDGE CLARENCE CUMBERLAND HAWKESBURY E HAWKESBURY V HAWKESBURY W LONGUELL PLANTAGENET RUSSELL	county subtotal	PRINCE EDWARD COUNTY AMELIASBURG ATHOL HALLOWELL HILLIER MARYSBURG N MARYSBURG S PICTON T SOPHIASBURG WELLINGTON V	county subtotal

ORTARIO COUNTIES: GEOGRAPHICAL SUMMARY, 1871

1021	TOT
Current DW	DUPLINGER
THUTBURGOOM	GEOGRAFILLAL
Committee	COULTED
OT CL ACTION	CHARLE

OBSERV	22 22 22 23 8 3 6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	350 350 350 350 350 351 351 351 351 351 351 351 351 351 351
VADD	6522 2411 725 70607 1740 1740 1170 9479 21577 6836 1406 22232 7120 202876 22232 7120 7120 2920 74303 74303 74303 74303	478671 31812 214189 99918 193143 89743 13150 42767 88995 24241 24241 24241 165537 17772 35310 81613 195283 55302 27110 81613 155061
SUMPROC	18172 3787 1837 200511 3680 40704 10704 37965 14870 1797 58483 1797 58483 213493 6010 6010 6010 6886 49890	1056428 1056428 104010 347844 215750 429365 236911 77306 69165 92461 121320 57955 80497 135664 363601 120780 91345
SUMRAWC	11650 1376 1080 129904 1940 33913 330 22605 16388 8034 391 3621 3620 139190 600 3473 370 2840 2840 2840 2840	284542 72198 121055 135946 147168 147168 19400 27503 150619 27503 150619 42461 54365 42461 54361 54361 5461 55523 40183 40183 41972 45700 76685 46176
WAGES	2830 8230 1086 1086 4213 4213 4213 4213 4213 4350 4350 4350 4350 4350 4350 4350 6407 6407	159272 128958 128958 199345 799346 65179 65179 4578 47744 47744 47744 19822 47744 19823 19823 19828 19328 19328 16564 16564
TOTEMP	122 190 190 100 130 130 125 100 100 100 100 100 100 100 100 100 10	250 250 250 250 250 250 250 263 263 263 263 263 263 263 263 263 263
EMPGIRL		4 .22 4
EMPBOY	20	25 22 11 13 13 14 15 15 16 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19
EMPWOM	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	101 12 24 25 21 21 21 12 13 13 12 289
EMPMEN	15 10 10 10 10 10 12 12 12 12 13 42	799 799 799 799 799 799 799 799 799 799
FLOCAP 1	800 65 217 170448 10601 389 389 5496 9150 8290 5000 5000 65020 65020 65020 65020	111592 145010 155000 17112 155000 17112 165010 170221 10221 10221 10221 10221 10300 17095 17095 16340 16340 16340 16340
FIXCAP	995 363 363 91080 2580 1776 1330 1331 13350 6050 60670 60670 60670 60670 8468	324555 143995 143995 16183 116183 13200 32755 87200 37760 15469 15469 15500 16890 16890 16890 16890 16890 16890 16890
FORCE	20 355 210 210 50 50 134 134 16	1 1 6 0 5 1 1 1 1 3 3 1 1 1 1 3 3 1 1 1 3 3 1 1 1 3 3 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 3 5 1 1 1 1
COUNTY CSD	RENFREW COUNTY ADMASTON ALGONA ALICE/FRASER ARNPRIOR V BAGOT/ BROWLEY BROWCHAM BRUDENELL/ GRATTAN HORTON MATAWATCHAN/ MCNAB PEMBROKE TP PEMBROKE TP PEMBROKE V PETAWAWA RENFREW V ROLPH/ SCEBASTOPOL STAFFORD WESTMEATH	SINCOR COUNTY ADJALA BARRIE T BARAFORD V COLLINGWOOD ESSA FLOS GWILLIMBURY INNISFIL MEDONTE MONO MULMUR NOTTAWASAGA ORILLIATP ORO SUNNIDALE TAY TECUMSETH TINY TOSSORONTIO VESPRA COUNTY SUDTOTAL

VADD OBSERV 68 74 74 22 26 52 52 60 60 78 78 78 21164165546023 2129945574603 155554 107408 107408 551197 166691 65041 160459 83141 28748 71035 98255 162102 29425 11066 33062 37479 43975 20238 84657 45345 17329 41937 84482 1740 165 2814 229100 72069 90475 4800 283008 15644 73408 1898910 818800 626314 51875 29056 320669 368789 1213610 431303 192700 403138 111516 299016 606315 260386 260386 SUMPROC 352313 76725 29457 108280 50621 68748 119320 38591 38591 152833 76407 152833 205056 2740 321 4765 62041 124758 249812 10892 659977 985877 985877 7128 4775545 1935060 1393266 106289 35262 189411 47300 18391 55218 17555 31078 248150 72545 17788 248150 72564 10954 SUMRAWC 164865 261381 662413 264612 127659 242679 61547 215875 318875 3118875 3118875 3118875 1000 156 1951 32941 51989 159337 6092 376092 48087 7482 75710 1109378 2875285 766252 56085 46894 226843 62015 22008 52080 118664 21210 60312 42978 48243 WAGES 687589 27241 21725 37807 37807 37807 3400 5401 11766 11766 111863 117722 117722 11189 30189 2019 329673 1020 112 1392 17718 34360 49410 2280 2280 124797 10490 1264 54890 330693 ONTARIO COUNTIES: GEOGRAPHICAL SUMMARY, 1871 TOTEMP 173 246 246 488 488 1120 1137 1122 1133 1133 1179 2040 318 217 217 267 2116 246 246 1115 1115 220 221 221 264 1461 3101 FLOCAP EMPMEN EMPWOM EMPBOY EMPGIRL 121 322 157 156 122 122 122 102 107 109 109 108 131 1563 1204 2434 11 68 100 100 22 22 337 122 41 10 159 256 182 635 118 107 171 104 108 1180 1180 1234 234 317013 14700 1181 27280 6755 18150 18150 4430 34260 11649 22585 10003 299171 21102 67050 123510 60870 101185 210 13279 19225 134604 1277 98840 18510 1622 710 86840 118460 188621 596930 298250 47150 554330 2033806 375721 72160 121509 149654 300 1165 140 43587 204279 204279 204279 44434 44434 4710 79470 FIXCAP 98460 98180 395726 145655 39195 149896 42170 78175 34150 11435 57150 19822 12555 8177 48685 29696 60588 9383 36529 44410 1509615 969699 647402 STORMONT-DUNDAS-GLENGARRY COUNTY FORCE 210 209 422 86 1140 1144 281 1112 272 272 250 250 75 309 278 3050 22 22 161 161 102 102 879 879 63 30 2680 2004 2900 2900 1132 1133 1153 1153 206 206 447 453 453 ROXBOROUGH WILLIAMSBURG WINCHESTER ANSON/LINDEN BEXLEY CARDEN/DALTO CORNWALL CEN CORNWALL TP CORNWALL WES CHARLOTTENBU FINCH IROQUOIS V KENYON LANCASTER LOCHIEL MATILDA MORRISBURG MOUNTAIN NEW HAMBURG PRESTON V WATERLOO N WATERLOO S FENELON LAXTON/... LINDSAY T MARIPOSA DUMFRIES N HESPELER V SOMERVILLE WELLESLEY WILMOT OSNABRUCK subtotal BERLIN T WOOLWICH subtotal subtotal COUNTY **TERULAH** COUNTY GALT T BMILY ELDON CSD VICTORIA WATERLOO county county COUNTY county

ONTARIO COUNTIES: GEOGRAPHICAL SUMMARY, 1871

Þ.				
VADD OBSERV	331 331 331 344 331 344 447 447 447	381	100 100 100 100 100 100 100 100 100 100	736
VADD	446977946066	711198	4360 124373 66030 66030 59171 196342 2330 33510 769353 39740 8088 54779 79982 79982 87315 35986 2437 2437	1707592
SUMPROC	67855 169466 54222 12385 20900 64193 118322 14440 176755 91965 370006 126930 250919	1556411	5975 58090 479358 226479 149593 3870 3871 13893 108584 126958 97812 20580 79695 507311	4636048
SUMRAWC	26330 888028 10484 7360 74375 643425 282350 10414 64934 58050	823305	1615 39364 354335 160387 88276 313060 62061 1060317 263440 5805 5805 5805 72179 51850 207349 108510 43709	2914223
WAGES	19557 17932 13510 5020 7750 7145 19433 30040 13965 49973 3410 31816	ហ	2050 8632 8632 12049 12049 19053 85378 19378 19587 220473 220743 220743 17910 17910 17910	758353
TOTEMP	105 71 71 45 45 34 21 86 88 86 14 121 17 17 132 44	1007	13 162 146 121 121 121 131 181 165 165 173 173 173	3009
EMPBOY EMPGIRL	· · · · · · · · · · · · · · · · · · ·	4	u & . u	27
EMPBOY	4 m n - r n - o - o m	44	13 13 14 16 10 10 10 10 10 10 10 10 10 10 10 10 10	180
EMPWOM	L4.14.04.0 .84.8 .2 .	75	114 175 175 175 175 177 177 177 177 177	341
EMPMEN	100 64 32 32 28 15 75 80 13 102 142 17 117	884	13 139 139 114 234 120 120 123 143 143 143	2461
FLOCAP	19150 65075 18410 3715 5205 7755 11900 22565 21020 10100 121800 3210 14405	331310	1330 8725 108150 56105 28315 115700 24800 675045 59250 4230 180075 22700 68206 37070 19016	1288140
FIXCAP	32820 32050 35035 6297 6297 9800 24890 36000 3515 35261 11140 47595	447134	7720 119230 91400 55425 147835 25606 88350 6908 549513 549513 549513 1596 29330	1396761
FORCE	162 66 28 35 35 31 113 6 119 50 50 116	1280	65 148 240 325 167 167 105 127 127 128 132 132 132 134 43	3612
CSD	COUNTY BERTIE CHIFFAWA V CLIFTON T CROWLAND FORT ERIE V HUMBERSTONE PORT COLBORN STAMFORD THOROLD V WAINFLEET WELLAND V	county subtotal	WELLINGTON COUNTY AMARANTH ARTHUR TP ELORA V ERAMOSA ERIN TP FERGUS V GARAFRAXA W GUELPH TP LUTHER MARYBOROUGH MINTO MOUNT FOREST NICHOL ORANGEVILLE PEEL PEEL PILKINGTON PUSLINCH	subtotal
COUNTY CSD	WELLLAND	county	WELLING	>

VADD OBSERV 335141 79449 32780 421553 233568 12868 9637 47855 47850 431447 789150 519442 1168133 865537 287850 523680 339605 85267 97620 77807 54792 28575 68547 30224 109977 SUMPROC 919220 200423 78900 88277 587885 16360 16360 16360 1779175 179175 262354 70515 196429 151479 372770 55018 1168556 246834 3053095 1617248 3053095 1617248 3053095 1617248 1617248 1617248 1617248 1617248 1617248 1617248 1617248 1617248 1617248 1617248 SUMRAWC 171995 751611 236790 3989918 307170 583759 116724 46120 461224 354317 6603 472084 367040 332128 1033697 704482 207562 41940 124605 121255 193341 368803 262793 25070 373097 308155 58758 WAGES 47690 53962 15759 182575 85342 280446 207311 236477 845331 12855 37014 937014 9381 52048 1115 52048 68178 96017 145670 1090885 116676 155141 3751 3751 323900 32618 ONTARIO COUNTIES: GEOGRAPHICAL SUMMARY, 1871 FLOCAP EMPMEN EMPWOM EMPBOY EMPGIRL TOTEMP 160 229 229 72 433 443 443 43 43 703 677 677 1325 63 222 222 90 30 30 246 246 23 24 24 12 99 143 152 68 75 30 363 205 205 205 445 30 30 41 619 619 755 755 93360 77826 12575 238300 173827 4452 4452 4452 4235 319800 423722 272980 71325 23765 48081 73905 93560 139725 89350 12880 364860 374671 132275 1948550 379250 45125 48125 48550 91249 78147 22050 506330 181343 5770 14550 57310 201700 442590 271750 FIXCAP 66780 31210 73882 121490 167342 167342 78457 667190 67190 6437735 1759850 437735 1759850 1765500 259234 58175 77045 75710 7714 12249662 FORCE 605 1136 673 673 934 79 79 110 110 629 629 NEWMARKET V SCARBOROUGH ST ANDREW ST DAVID ST JAMES ST JOHN ST LAWRENCE ST PATRICK VAUGHAN GWILLIMBURY HOLLAND LAND BINBROOK DUNDAS T FLAMBOROUGH GLANFORD SALTFLEET ST ANDREW ST GRORGE ST LAWRENCE ST MARY ST PATRICK ETOBICOKE ANCASTER county subtotal AURORA V GEORGINA subtotal COUNTY MARKHAM BEVERLY BARTON COUNTY CSD YORK COUNTY WENTWORTH county

_
187
OUTPUT,
INDUSTRIAL
OF
SY VALUE OF
BY
RANKING
COUNTIES
ONTARIO

ESTAB	1506	741	986	534	1210	723	736	1210	451	663	951	675	367	673	835	619	410	515	370	438	435	383	871	368	774	355	381	206	391	389	299	386	539	307	350	291	91
VADD	9069657	4120419	3373119	2032486	1951466	1898910	1707592	2115723	1557501	1575555	1595061	1428588	1527668	1039384	1320793	1171198	1150643	1054782	1332737	1037531	902752	833419	818800	825438	662660	624728	711198	052	626314	039	432222	63	496521	492	478671	343706	169563
SUMPROC	0	0265	7103	9453	5662	5545	_	-	_	_	_			_	_	_	_	_	_	~	_	_		1883429	~		_	1520752	1393266	1331229	1264647	1249902	1141332	1083652	05642	836953	7984
SUMRAWC	9919172 1																																		584542	476819	181627
WAGES	637024	357756	190187	060210															261867				_				_	_	_		_	۵.		_	9272	172525	9792
TOTEMP	٠.,	~			-11	_																		1782											970	822	817
EMPGIRL	348	170	28	30	80	121	27	22	100	22	16	15	56	14	18	64	32	30	13	10	12	21	89	24	17	37	4	m	11	ഗ	œ	4	ស	m	14	4	•
	937	691	340	152	252	224	180	271	195	163	215	159	102	154	201	195	177	171	74	42	117	167	73	117	85	100	44	61	83	29	90	107	61	09	26	28	62
EMPWOM EMPBOY	2456	1095	490	574	534	322	341	697	391	194	289	216	311	146	426	462	282	298	73	119	86	186	336	166	168	117	75	137	157	52	110	109	104	63	101	121	24
RMPMEN	9935	5896	3868	3199	3218	2434	2461	2601	2054	2426	2986	2294	1866	1804	2515	1949	2222	1670	1051	1035	1554	1295	1563	1475	1358	868	884	1248	1204	1071	777	1001	1016	720	199	699	731
FLOCAP	6622343	2214637	1797789	1806120	1380407	2033806	1288140	916864	1080100	1431178	944992	840190	927930	609577	976986	844153	678187	826871	338245	418234	662254	630825	554330	557490	357677	560319	331310	386042	375721	419399	1161752	327905	231531	229316	371712	207441	518670
FIXCAP	12249662	2592434	2114701	2213744	1836830	1509615	1396761	1342366	1111115	1331439	1652677	1052910	1206835	1131933	908849	1136331	1063578	882872	377383	533628	591701	684383	647402	653153	594829	611197	447134	481037	969699	431433	361695	420867	533643	274641	324555	312101	707307
FORCE	7714	4360	3651	5591	6356	3838	3612	4760	3016	3748	6149	3030	1627	4270	4219	3481	2276	2285	1468	1783	2210	2527	3050	2354	2995	1562	1280	2624	2680	2555	3617	2992	2943	1474	1605	1164	759
RANK COUNTY	1 YORK	2 WENTWORTH	3 MIDDLESEX	4 CARLETON			7 WELLINGTON	8 LEEDS-GRENVI			-	_	13 BRANT		15 HASTINGS								23 STORMONT-DUN		_		27 WELLAND	28 ELGIN	29 VICTORIA				33 BRUCE	34 HALDIMAND	35 RENFREW	36 PRINCE EDWAR	37 NORTHERN DIS

NORTHERN DIS

9069657 4120419 3373119 2015723 2032486 1951466 11595061 11595061 11595061 1157555 115755 115755 115755 115755 11575 115 19377640 8980265 7677103 4105302 5239453 5239453 463608 3465408 3465408 3465408 3346197 3346197 3032034 2895949 2591747 2060112 1988354 19844074 11883429 11550411 11705422 11393266 11393266 1141332 1141332 11655755 1141332 11656428 1166447 11084647 836953 479845 4824126 4824126 4824126 1939135 3202967 3202967 3202967 193928 1136267 1939420 17113300 11033104 11010655 11052117 1109378 813987 11052117 1106514 813987 1006714 729861 729861 729861 729861 729861 729861 729861 729861 729861 729861 729861 3637024 2357756 1190187 778305 6891693 6891693 772717 731941 701841 642856 632039 772717 731941 772717 731941 742185 642856 642856 642856 642856 642856 642856 742859 742869 WAGES 33556 34785 34 EMPMEN EMPWOM EMPBOY EMPGIRL 99935 28868 28 FLOCAP 6622343 1799789 1906120 1906120 1906120 1906120 1283806 1288140 1080100 927930 927930 927930 927930 927930 927930 927931 927933 927933 927933 927933 927933 927933 927933 927933 927933 927933 927933 9277677 927677 927677 927677 927677 927677 927677 927677 2592434 2114701 1342366 2213744 1836830 1836830 11509615 1331439 1052617 1052610 372610 373628 684383 1063578 1831833 1931833 6847801 WENTWORTH
MIDDLESEX
LEEDS-GRENVI
CARLETON
NORTHUMBERLA
WATERLOO
WELLINGTON
SIMCOE
ONTARIO
LINCOLN
SIMCOE
ONTARIO
LINCOLN
SIMCOE
ONTARIO
LINCOLN
ESSEX
HASTINGS
LAMARK
FRONTENAC
PERTH
HURON
LAMBTON
LAMBTON
KENT
HURON
LAMBTON
CENT
ENTIN
GREY
VICTORIA
BELGIN
GREY
VICTORIA
PEEL
NORFOLK
LENNOX-ADDIN PRESCOTT-RUS PRINCE EDWAR HALDIMAND RENFREW RANK COUNTY

CHITARIO COUNTIES: RAHKING BY ADDED VALUE, 1871

4120419
3373119
1951466
2032486
2115723
113207061
1150643
1151150643
11711198
11711198
11711198
11711198
11711198
11711198
11711198
11711198
11711198
11711198
11711198
11711198
11711198 19377640 8980265 7677103 5239453 4405408 3032034 4775545 4636048 3549818 3549818 3549818 3549818 3549818 3549818 3549818 3549818 1883429 1988354 1944074 1705422 1393266 1520752 1249902 2273604 2060112 1331229 1165132 1165641 1156441 1156428 11056428 ONTARIO COUNTIES: RANKING BY HUMBER OF INDUSTRIAL WORKERS, 1871 4824126 4824126 3023367 3202967 1939135 1939135 1974013 1974013 1974013 1974013 1974013 1974013 197301 1973 SUMRAWC 891493 1060210 778305 772717 6832039 6832039 758353 731941 701841 626895 632618 563807 6451766 451766 413813 445512 266405 3330693 330693 30883 221082 270029 1187869 235751 159271 1157271 1159272 1189792 WAGES 33676 4476 TOTEMP EMPWOM EMPBOY EMPGIRL FLOCAP EMPMEN 9935 6622343 2214637 1380407 1806120 946986 946986 2033806 1288140 1080100 840190 840190 844153 927930 826871 669577 554330 5554340 375721 386042 327905 338245 418234 418234 231531 560319 331310 1161752 371712 207441 518670 1836830 2213744 1342366 1652677 908849 1509615 11111175 1063578 1052910 1136331 1206835 847402 6531701 684383 594829 66565 481037 420867 377383 53364383 53364383 361695 361695 324555 274641 312101 1331439 STORMONT-DUN PETERBOROUGH KENT HALTON GREY VICTORIA ELGIN LENNOX-ADDIN PRINCE EDWAR NORTHUMBERLA PRESCOTT-RUS LEEDS-GRENVI HASTINGS
WATERLOO
WELLINGTON
ONTARIO
LINCOLN
FRONTENAC
OXFORD
LANARK
BRANT
PERTH
HURON YORK WENTWORTH MIDDLESEX HALDIMAND CARLETON ESSEX LAMBTON NORFOLK BRUCE RANK COUNTY

NORTHERN DIS

ESTAB	1506 12401 12411 12401 12104 12104 12104 1221 1361 1361 1361 1361 1361 1361 1361	381 370 307 389 91
VADD	9069657 4120419 21157419 2032486 3373119 1171198 11320793 11320793 11320793 11320793 11320793 11320793 11320793 1132061 11595061	711198 1332737 349247 603968 169563
SUMPROC	19377640 410502652 410502652 5239453 5025662 7677103 3032034 3032034 3032034 304408 194408 1105422 11333266 3053084 1141332 1055755 1141332 1055755 1141332 1055755	1556411 2273604 1083652 1331229 479845
SUMRAWC	9919172 4824126 3202967 3039379 4273667 1711241 2373958 1711241 1711241 1736267 1106714 1014088 111106515 1052217 1052217 1052217 1052217 1052217 1052886 813345 619296 832345 584542	823305 948042 724155 729861 181627
WAGES	3637024 2357756 778305 1060210 891493 1190187 563807 632039 701841 758353 329673 642856 642856 642856 451766 472717 6266405 431603 303833 172525 157271 187869 159272	235751 261867 184680 270029 189792
TOTEMP	13676 33591 33591 33591 33591 2670 3100 3100 3100 2711 3506 3506 3506 3506 3506 3506 3506 3506	1007 1211 846 1187 817
EMPGIRL	348 170 170 188 101 100 100 100 100 100 100 100 10	14 E C C .
EMPBOY	15937 19937 1993 1993 1993 1993 1993 1993	447
ВМРМОМ	1094 1095 1095 1095 1095 1095 1096 1096 1096 1096 1096 1096 1096 1096	253335
EMPMEN	28833 28833 331991 28833 3321991 2884 2886 2886 2886 2886 2886 3886 3886 3886	1934 1051 720 1071 731
FLOCAP E	6622343 2214664 1806120 13806120 13806120 1797789 844153 976986 1288140 2033806 927930 826871 840190 14311178 6308577 357490 6308577 1161752 327905 327905 327905	331310 338245 229316 419399 518670
FIXCAP	12249662 2592434 1342366 2213744 1836830 2114701 1136331 908849 11316761 1509615 1652677 1052910 1631439 684829 653153 66566 1131933 42101 533643 361695 420867	447134 377383 274641 431433 707307
FORCE	7414 44360 55560 65560 65560 65560 65560 65560 65560 65560 65560 650 6600 6500 6500 6500 6500 6500 6500 6500 6500 6500 6500 6500 6500 65	1280 1468 1474 2555 759
RANK COUNTY	1 YORK 2 WENTWORTH 3 LEEDS-GRENVILLE 4 CARLETON 5 NORTHUMBERLAND-DURHA 6 MIDDLESEX 7 LANARK 8 HASTINGS 9 LINCOLN 10 WELLINGTON 11 STORMONT-DUNDAS-GLEN 12 WATERLOO 13 BRANT 14 PERTH 15 SIMCOB 16 FRONTENAC 17 OXFORD 18 ONTARIO 19 HALTON 20 GREY 21 PETERBOROUGH 22 VICTORIA 23 HURON 24 ELGIN 25 PRINCE EDWARD 26 LAMBTON 27 PEEL 28 PRESCOTT-RUSSELL 29 LENNOX-ADDINGTON 30 BRUCE 31 RENFREW	33 WELLAND 34 ESSEX 35 HALDIMAND 36 NORFOLK 37 NORTHERN DISTRICTS

ONTARIO COUNTIES: RANKING BY WOMEN WORKERS, 1871

ESTAE ONTARIO COUNTIES: RANKING BY WATER POWER, 1871 (ONLY WATER-POWERED FIRMS) 474281 399164 338539 625822 625822 3300952 3300966 608906 608906 608906 117668 111768 111768 111768 111768 111769 VADD 702935 554363 1062981 2570249 2361709 2361709 2367381 1213380 1100957 1100957 1100957 1657289 1657289 1657289 1657289 1657289 1746903 175184082 17518408 17518408 17518408 17518408 17518408 17518408 17518408 17518408 17 800954 553271 1305832 290554 506543 465640 131530 71950 160 SUMPROC 1863314 1807346 1595890 812156 612156 637148 726308 11063372 116063372 1556820 1603372 1603372 16336830 1633633 163368 SUMRAWC 214164 224120 1534120 60917 10917 1111544 210674 86410 86410 86410 1111544 1111544 125669 1111564 125669 140277 14027 14 WAGES FLOCAP EMPMEN EMPWOM EMPBOY EMPGIRL TOTEMP 1402599 264820 92750 187246 604016 171568 107560 1115811 612175 40305 123409 191829 191829 191829 191829 191829 191829 191829 191829 19185 115185 36992 12305 116345 116345 1163460 12305 116345 775269 280350 3930250 3930260 478312 633070 633070 536500 536500 536500 536500 536500 536500 536500 536500 536500 536500 536500 162315 243500 228903 375150 241500 241500 252715 1138400 1108800 203800 13800 13800 13800 1450900 710620 733850 691300 689200 228016 343897 88500 FIXCAP 55116 336999 336999 22856994 22856999 238599 238599 238599 23859 FORCE SIMCOE PRESCOTT-RUS LANARK LENNOX-ADDIN PRINCE EDWAR DIS CARLETON STORMONT-DUR PETERBOROUGH LEEDS-GRENVI WELLINGTON BRUCE WENTWORTH FRONTENAC NORTHERN I MIDDLESEX HALDIMAND ONTARIO ELGIN VICTORIA OXFORD HASTINGS HURON RENFREW NORFOLK HALTON LINCOLN RANK COUNTY GREY

ESTAB 5417065 697720 2414590 1859180 715984 432119 700439 1126066 191134 201994 250191 130116 434569 353738 250191 130116 434569 353738 170308 230949 117877 ONTARIO COUNTIES: RANKING BY STEAM POWER, 1871 (ONLY STEAM-POWERED FIRMS) VADD 10162723 1341914 4729098 17292727 3765856 12065801 1609767 1025590 1329524 11872652 11872652 11872652 11872652 11872652 1043867 561006 441179 680416 936523 1043867 573393 253610 189018 189018 168155 40925 SUMPROC 4773491 645494 772598 1906676 6937322 8937322 484811 775003 77500 SUMRAWC 1899877 382266 1541171 203858 508663 22850444 22850409 134221 134221 134221 134221 141515 36594 200582 146256 110407 110407 110407 110407 110407 110407 110407 110407 110407 110407 110400 110559 WAGES 6369 4215 4215 1632 9991 1995 1006 1106 TOTEMP FLOCAP EMPMEN EMPWOM EMPBOY EMPGIRL 223 3888 1020 1 1000 3343685 459690 1038970 340695 1010360 390924 433700 296832 66632 66632 66565 125400 133880 165879 165879 165879 165879 165879 165879 165879 165879 165879 165879 165879 165879 17500 17750 9981120 672085 1156290 489400 489400 481000 381630 517425 517425 517425 517425 517425 628400 169250 169250 169250 169250 169250 169250 169250 169250 169250 17583 77583 77583 77583 77583 17583 17583 17583 17583 17583 17583 17583 17583 17583 FIXCAP 22671 22671 22671 22312 22312 22312 16039 11039 FORCE ONTARIO VICTORIA NORTHUMBERLA BLGIN HASTINGS HALTON NORFOLK BRUCE LEEDS-GRENVI LINCOLN BRANT FRONTENAC WELLAND STORMONT-DUN GREY PETERBOROUGH NORTHERN DIS PRESCOTT-RUS PRINCE EDWAR LENNOX-ADDIN WELLINGTON WATERLOO YORK SIMCOE WENTWORTH HALDIMAND MIDDLESEX CARLETON KENT OXFORD PERTH LAMBTON LANARK RANK COUNTY HURON ESSEX

ESTAB OHTARIO COUNTIES: RANKING BY HORSE POWER, 1871 (ONLY HORSE-POWERED FIRMS) VADD 122736 57577 55694 31337 63711 16936 27732 27909 339283 339283 339283 32845 11127 14957 2756 7256 8468 8468 8468 13370 13370 28578 26665 49562 31681 26529 25388 29870 10147 17149 29443 29160 43629 20957 SUMPROC SUMRAWC WAGES 258087 330047 111971 111971 111971 111971 111971 111971 111970 111971 111030 11030 11030 11030 11030 11030 11030 11030 11030 110 FLOCAP EMPMEN EMPWOM EMPBOY EMPGIRL TOTEMP 65390 25044 310950 111590 80150 80150 10640 110640 111162 111150 11362 1 FIXCAP 63945 33056 47340 115925 115925 116805 10150 10150 10150 10150 101605 10 FORCE YORK MIDDLESEX NORTHUMBERLA OXFORD
LEEDS-GRENVI
BRUCE
STORMONT-DUN
HALDIMAND PRINCE EDWAR PETERBOROUGH WELLINGTON ONTARIO SIMCOE
CARLETON
NORFOLK
VICTORIA
GREY
HASTINGS
BRRTH
BRANT
FRONTENAC
LAMBTON WENTWORTH ELGIN WATERLOO ESSEX HURON LINCOLN LANARK RANK COUNTY

PRESCOTT-RUS

VADD OBSERV 238539 196252 1112569 240767 273595 17910467 100465 61387 61387 61387 61387 61387 61387 702935 474281 554363 608906 627262 312668 625822 432901 338765 407063 355828 355828 355828 3539557 2570249 2367381 2361709 22184082 2184082 19461934 194619034 110091935 110091935 110091935 110091936 110091936 110091939 11057289 SUMPROC 1863314 1595890 1807346 11605372 116339353 116339353 1196349 1196349 1196349 1196349 1196349 1196349 1196349 1196349 1261136 1261136 1261136 1261136 1261136 1261138 1 SUMRAWC 255740 2557717 251417 2216674 2240692 2240692 2240692 1115941 1115244 1115244 11153282 1115328 111564 181720 181720 181720 181720 18182 18192 18 WAGES FLOCAP EMPMEN EMPWOM EMPBOY EMPGIRL TOTEMP 1341312 1402599 519822 1115811 612175 316270 316270 314400 236915 264820 236915 264820 3187246 318724 318724 318724 318724 318724 318724 318724 318724 318724 318724 318724 318724 318724 3187 123409 115185 124703 116345 107500 92750 280396 1450900 691300 710620 633070 775260 775260 775260 775260 689200 689200 343320 228016 343320 228016 3132500 138600 228903 132500 1388500 2339900 138850 FIXCAP YORK NORTHUMBERLAND-DURHA STORMONT-DUNDAS-GLEN PRINCE EDWARD NORTHERN DISTRICTS LAMBTON LINCOLN LEEDS-GRENVILLE WELLINGTON LENNOX-ADDINGTON HALTON PRESCOTT-RUSSELL PETERBOROUGH NORFOLK OXFORD HALDIMAND WELLAND VICTORIA BRUCE FRONTENAC BRANT WENTWORTH MIDDLESEX WATERLOO HASTINGS CARLETON LANARK RENFREW SIMCOE RANK COUNTY PERTH HURON GREY

ONTARIO COUNTIES: RANK BY OUTPUT OF WATER-POWER FIRMS, 1871

ONTARIO COUNTIES: RANK BY OUTPUT OF STEAM-POWER FIRMS, 1871

RANK COUNTY	FORCE	FIXCAP	FLOCAP E	MPMEN E	MPWOM E	MPBOY 1	EMPMEN EMPWOM EMPBOY EMPGIRL TOTEMP	POTEMP	WAGES	SUMRAWC	SUMPROC	VADD OBSERV	BSERV
1 YORK	3852	9981120	3343685	4995	811	422	141	6369	œ	77349	10162723	5417065	185
WENTWORTH	2664	1156290	1038970	3673	138	388	24	4223	1541171	2312008	4729098	2414590	130
MIDDLESEX	2312	1161170	1010360	1416	36	175	Ŋ	1632	508663	1906676	3765856	1859180	136
X A C C A	1399	255700	208632	467	15	29	9	517	4	75798	1872652	2606	09
	1642	485900	460935	000	38	9	, ;	966	·	378	92609	715984	94
	747	511490	256020	200	7 0	0	34	1006	246086			749799	80
		000000	20000) [, ,	5 -	452	٠,,	2 2 2	40114	700507	9 9
	Took	OFOTAS	759977	T 7 %	- ,	7 7 7	٠, ١	7 .	17750	2 7	* 1 7 / 1	7000) c
	2671	672085	459690	1292	16	102	Դ	1415		645494	34191	07//69	35
9 WELLINGTON	1513	517425	512220	855	46	75	•	916	6660	629085	1329524	700439	97
10 HURON	2644	632050	340695	728	13	81	9	828	203858	2259	1292727	542679	119
	2039	409400	390924	803	23	09	Ŋ	891	231444	698322	1205801	507219	66
	1314	623005	666750	1061	19	89	•	1148	365402	451447	1124285	672838	09
	646	582350	323550	787	m	26	•	846	254601	620220	1043867	423647	44
	1639	481000	433700	744	52	97	18	911	207977	484811	1025590	432119	82
	1233	595560	451240	861	52	49	4	696	253366	430137	1001234	571097	59
16 BRANT	929	688700	220800	785	'n	37	ო	830	322136	301715	936523	634808	37
	1088	310200	566565	905	7	134	•	1041	200582	465389	819127	353738	36
	819	281800	254409	441	7	19	2	529	160965	306610	741179	456	47
	629	234000	165879	425	m	30	•	458	151231	294322	680416	386094	43
20 CARLETON	446	279200	147508	412	•	28	•	440	179590	256455	582017	325562	20
-	607	163100	129000	205	•	11	•	216	59423	230840	573393	342303	47
22 HALTON	1045	277050	309847	478	m	64	•	545	146256	279482	561006	281524	25
23 LANARK	498	214150	122200	277	27	48	ഹ	357	98184	246346	478495	230949	27
24 ELGIN	1167	169250	133880	370	Ŋ	19		394	92694	258090	460084	201994	69
25 VICTORIA	1255	256800	125400	331	Ŋ	32	-	372	80288	4853	439671	191134	42
	1028	157645	209225	425	m	23	•	451	110407	162850	413041	250191	28
27 GREY	543	134450	109450	216	•	13	•	229	53773	423	304241	170308	35
28 STORMONT-DUNDAS-GLEN	594	86700	34180	143	•	œ	•	151	30721	3573	253615	117877	59
	941	155650	46280	221	7	12	7	236	44251	112011	243372	130116	26
	455	62850	29650	164	m	11	•	178	39640	135524	230600	92026	24
	3335	112845	46912	144	٦	15	•	160	53002	108493	1900	92185	25
	453	77583	40450	116	ı so	23	•	144	24120	117446	8901	71572	11
	221	113900	74200	145	-	24	ო	173	43263	77725	168155	90430	16
-	234	60300	117390	134	•	13	•	147	35520	96150	164762	68612	13
	277	485285	401785	227	9	က	•	236	54400	80800	150600	00869	7
	125	25200	17750	39	•	80	•	47	9850	84	60	21081	7
	82	12000	15800	34	•	00	•	42	8500	18800	400	15200	m

OBSERV 3054929 1343793 1269421 960360 770312 591194 571275 571248 571248 571348 571348 640373 371479 371479 371479 371479 371479 371479 267441 305597 281108 259148 2269310 226784 203385 189675 198750 171116 118679 VADD 11689 6658557 3034493 2948010 2027577 1132566 1132566 1172668 1173668 1133556 1041852 1041852 1041852 1040555 1038481 956060 953713 75854 580239 566419 509173 497581 463115 454576 449790 447175 411985 389568 SUMPROC 3489954 1675473 1067217 776663 642847 626871 626871 626871 626871 715663 317615 317615 317615 221325 221325 221325 191984 182007 1182007 1184383 117733 117733 117733 117733 33773 SUMRAWC 1421143 664208 664208 486311 395970 315263 377223 377223 377223 377223 377223 377223 377223 377223 377223 10121 161646 161646 161646 17695 17603 17605 WAGES FLOCAP EMPMEN EMPWOM EMPBOY EMPGIRL TOTEMP 1810469 671635 927602 378395 358070 268393 268393 291406 378380 203327 207976 207976 207976 12332 12332 124253 124253 125177 11519 105180 11519 12525 125363 125363 125363 125363 125363 125363 125363 125363 125363 125363 125363 125363 125363 678975 906864 459144 483310 330986 301783 301783 2751305 2339622 233955 263142 26142 26142 26142 26142 11632 140812 132348 129983 148376 109517 120359 116697 11 FIXCAP FORCE CARLETON NORTHUMBERLAND-DURHA PETERBOROUGH STORMONT-DUNDAS-GLEN PRESCOTT-RUSSELL NORTHERN DISTRICTS HALTON VICTORIA LENNOX-ADDINGTON LAMBTON WELLINGTON LEEDS-GRENVILLE PRINCE EDWARD FRONTENAC OXFORD PRRTH MIDDLESEX WENTWORTH HASTINGS LINCOLN BRANT WATERLOO ONTARIO WELLAND SIMCOR LANARK RANK COUNTY ELGIN GREY

ONTARIO COUNTIES: RANK BY OUTPUT OF HAND-POWER FIRMS, 1871

	50 MT 6 TM	D. 2007	MOM ODED	-	
CENSUS SUBDISTRICT NAME	SQ.MLS PO	OPULATM	EST CDID	KD	COUNTY
10071700	60.04	2000	21 0000		MIDDIRGRY
ADELAIDE ADJALA	68.84 72.22	2909 2878	21 O008 42 O040	A D	MIDDLESEX SIMCOE
ADMASTON	124.31	1988	6 0081	_	RENFREW
ADOLPHUSTOWN	17.20	756	14 0063		LENNOX-ADDINGTON
ALBEMARLE/	200.36	678	7 0028		BRUCE
ALBION ALDBOROUGH	91.50 124.31	4857 3506	73 O040 30 O005		PEEL ELGIN
ALFRED	75.00	1697	14 0075	F	PRESCOTT-RUSSELL
ALGONA	94.25	700	8 0082		RENFREW
ALICE/FRASER ALMONTE V	171.63 1.02	1566 2080	9 O082 46 O080	I B	RENFREW LANARK
ALNWICK	31.88	1369	13 0054	_	NORTHUMBERLAND-DURHAM
AMABEL	125.00	1805	10 0028	_	BRUCE
AMARANTH	103.53	1943	10 0035		WELLINGTON
AMELIASBURG AMHERST ISLAND	81.25 26.30	3304 1189	42 O059 7 O063		PRINCE EDWARD LENNOX-ADDINGTON
AMHERSTBURG T	1.18	1936	27 0001	_	ESSEX
ANCASTER	74.48	5005	85 0022		WENTWORTH
ANDERDON	37.28	1895	8 0001	_	ESSEX
ANSON/LINDEN/	203.47 2.11	515	3 0053 22 0081		VICTORIA
ARNPRIOR V ARRAN	85.88	1714 3780	44 0028	_	RENFREW BRUCE
ARTEMESIA	108.11	3484	48 0036	Ğ	GREY
ARTHUR TP	106.45	4376	19 0035	D	WELLINGTON
ASHBURNHAM V	1.33	1197	19 0057	_	PETERBOROUGH
ASHFIELD ASPHODEL	103.41 61.88	3893 3247	29 O026 87 O057		HURON PETERBOROUGH
ATHOL	36.44	1740	18 0059		PRINCE EDWARD
AUGUSTA	116.16	5163	83 0069		LEEDS-GRENVILLE
AUMICK LAKE	812.97	160	1 0086		PARRY SOUND DIST
AURORA V	1.88	1132	27 0043	С	YORK
BAGOT/	160.57	1142	6 0081	С	RENFREW
BARRIE T	3.28	3398	75 0042		SIMCOE
BARRIE TP BARTON	117.97 24.61	316 2865	2 O064 20 O022		FRONTENAC WENTWORTH
BASTARD/BURGESS S	111.84	3540	128 0067	Ī	
BATCHEWANING	2701.00	145	0 0090		ALGOMA DIST
BATH V	3.28	601	23 0063		LENNOX-ADDINGTON
BAYHAM	99.77 93.45	3220 4892	46 O079 88 O006		LANARK ELGIN
BECKWITH	98.73	1977	2 0079		LANARK
BEDFORD	133.92	1839	14 0064		FRONTENAC
BELLEVILLE T	2.32	7305	102 0060		HASTINGS
BELMONT/METHUEN BENTINCK	226.00 122.39	1575 5050	21 0057 61 0036	F	PETERBOROUGH GREY
BERLIN T	4.93	2743	68 0032	D	WATERLOO
BERTIE	57.99	2933	50 0019	С	
BEVERLY	113.80	5803	81 0023		WENTWORTH
BEXLEY BIDDULPH	42.39	489	2 0053	_	VICTORIA
BINBROOK	63.66 40.92	4198 1946	65 0008 18 0022	F B	MIDDLESEX WENTWORTH
BLANCHARD	74.80	3905	20 0029	_	PERTH
BLANDFORD	45.66	2008	29 0014	F	
BLENHEIM	100.63	6398	107 0014	G	OXFORD
BONNECHERE BOSANQUET	452.50 113.48	377 4425	4 0083 62 0004	J	NIPISSING DIST LAMBTON
BOTHWELL T	3.36	995	32 0003	E	
BOWMANVILLE T	5.27	3034	60 0050	В	NORTHUMBERLAND-DURHAM
BRADFORD V	2.66	1130	36 0041	C	
BRAMPTON V BRANT	2.23 110.76	2090 5994	46 0039 59 0027	E	PEEL BRUCE
BRANTFORD E	53.47	3461	30 0016	В	BRANT
BRANTFORD T	2.45	8107	99 0015	D	BRANT
BRANTFORD W	67.91	3406	49 0015	C	BRANT
BRIGHTON TP BRIGHTON V	80.55 4.17	3734 1357	44 0055 27 0055	C D	NORTHUMBERLAND-DURHAM NORTHUMBERLAND-DURHAM
BROCK	107.09	5175	82 O049	E	
BROCKVILLE CENTRE WARD	0.36	1912	69 0068	_	LEEDS-GRENVILLE
BROCKVILLE KAST WARD	0.35	1483	21 0068	С	LEEDS-GRENVILLE
BROCKVILLE WEST WARD	0.18	1707	23 0068		LEEDS-GRENVILLE
BROOKE BROOKE	77.94 120.91	1428 2538	22 O082 10 O004		RENFREW LAMBTON
BROUGHAM	101.25	2536 521	2 0081	D	
	302720				

CENSUS SUBDISTRICT NAME	SQ.MLS	POPULATN	EST CDID	ED	COUNTY
	106.26	2764	43 0028		BRUCE
BRUCE	106.26 1212.81	3764 1298	7 0089		ALGOMA DIST
BRUCE MINES BRUDENELL/	354.16	1210			RENFREW
BURFORD	107.09	5543			BRANT
BURGESS N	61.25	1358		D	LANARK
BY WARD, OTTAWA	0.31	5138	92 0077	D	CARLETON
	54.01	21.55	20 0010		*********
CAISTOR	54.81	2166 4785	20 0018 76 0040		LINCOLN
CALEDON CALEDONIA	107.13 74.42	1281	14 0075		PRESCOTT-RUSSELL
CALEDONIA V	. 1.09	1246	42 0017		HALDIMAND
CAMBRIDGE	95.31	769			PRESCOTT-RUSSELL
CAMDEN E	146.25	5792	88 0064		LENNOX-ADDINGTON
CAMDEN W	87.19			_	KENT
CANBOROUGH	34.23	1209			HALDIMAND
CARADOC	121.73 141.12	5065 1027			MIDDLESEX VICTORIA
CARDEN/DALTON CARLETON PLACE V	1 03	1205	31 0079		LANARK
CARLOW/MAYO	127.08	285	3 0062		HASTINGS
CARRICK	95.57	5005	42 0027		BRUCE
CARTWRIGHT	77.81	2514	31 0050	С	NORTHUMBERLAND-DURHAM
CATARAQUI WARD, KINGSTON	0.52	2036	34 0066		FRONTENAC
CAVAN	102.63	4761	101 0051	_	NORTHUMBERLAND-DURHAM
CAYUGA N	53.67	2012	12 0017		HALDIMAND
CAYUGA S	21.45	972 803	21 0017 10 0017	E	HALDIMAND HALDIMAND
CAYUGA V	2.22 0.47 532.39 131.64	530			LINCOLN
CENTRE WARD, NIAGARA CHANDOS/ CHARLOTTENBURG	532.39	721		_	PETERBOROUGH
CHARLOTTENBURG	131.64	6331		A	
CHARLOTTEVILLE	90.20	4097		C	NORFOLK
CHATHAM T	2.63	5873	96 0002	G	KENT
CHATHAM TP	144.23		37 0002	F	
CHINGUACOUSY	127.50	6129	64 0039		PEEL
CHIPPAWA V	0.94	922	31 0019 9 0076		WELLAND
CLARENCE CLARENDON/	109.38 189.83	2666 408	3 0064		PRESCOTT-RUSSELL FRONTENAC
			94 0050	D	
CLARKE CLIFTON T CLINTON TP CLINTON V COBOURG T COLBORNE COLBORNE V COLCHESTER COLLINGWOOD T COLLINGWOOD TP CONGER	2.34	1610	13 0019	_	WELLAND
CLINTON TP	40.85	2782	76 0021	E	LINCOLN
CLINTON V	1.23	2016	26 0026	F	
COBOURG T	4.02	4442	87 0054		NORTHUMBERLAND-DURHAM
COLBORNE	55.41	2429	18 0026 35 0055		HURON
COLBORNE V COLCHESTER	102 85	823 2920	30 0001	_	NORTHUMBERLAND-DURHAM ESSEX
COLLINGWOOD T	7.03	2829	50 0042	В	SIMCOR
COLLINGWOOD TP	108.59	3576			GREY
CONGER	337.50	40	0 0085	G	MUSKOKA DIST
CORNWALL CENTRE WARD	0.36		18 0073	В	STORMONT-DUNDAS-GLENG
CORNWALL EAST WARD	0.71	490	0 0073	С	
CORNWALL TP	101.06	5081	49 0073	D	
CORNWALL WEST WARD	0.38 108.94	457 3833	4 0073 71 0055	A A	_
CROSBY N	80.00	2127	59 0067		LEEDS-GRENVILLE
CROSBY S	80.00	2054	49 0067		LEEDS-GRENVILLE
CROWLAND	30.93	1317	19 0019	E	
CULROSS	91.32	3839	38 0027	С	BRUCE
CUMBERLAND	124.12	2922	33 0076	С	PRESCOTT-RUSSELL
DARLING	97.81	801	5 0080	73	TANADY
DARLINGTON	114.69	5931	70 0050	F	LANARK NORTHUMBERLAND-DURHAM
DAWN	105.72	1116	13 0003		LAMBTON
DELAWARE	43.98	2523	30 0007		MIDDLESEX
DENBIGH/	348.66	325	5 0064	E	
DERBY	65.18	1946	29 0037	E	GREY
DEREHAM	107.09	5838	80 0013	A	
DEUX RIVIERES	201.50	87	0 0084	В	NIPISSING DIST
DORCHESTER N DORCHESTER S	62.16	4117 2071	47 0009 26 0006		MIDDLESEX
DOURO	51.00 76.34	2671	17 O057	D	
DOVER	107.58	3315	16 0002	E	
DOWNIE	79.45	3738	21 0029	F	
DRAPER/RYDE/	238.19	521	2 0085	_	MUSKOKA DIST
DRUMMOND	98.11	2467	24 0079	G	LANARK

CENSUS SUBDISTRICT HAME	SQ.MLS	POPULATN	EST CDID	ED	COUNTY
DUMFRIES N	69.69	3951	50 0031		WATERLOO
DUMFRIES S	75.00	3468	43 0016		BRANT
DUMMER	116.73	1951	30 0057		PETERBOROUGH
DUNDAS T	0.94 28.82	3135	64 0023 5 0017	_	WENTWORTH
DUNN	1.62	1049 1452	17 0018		HALDIMAND HALDIMAND
DUNNVILLE V DUNWICH	111.56	3731	33 0005		RLGIN
DONWICH	111.50	2/31	33 0003	ь	ELGIN
EAST WARD, NIAGARA	0.47	559	0 0020	D	LINCOLN
EASTHOPE N	68.66	2998	36 0030		PERTH
EASTHOPE S	. 38.57	2275	18 0029	_	PERTH
EDWARDSBURG	110.94	5417	78 0069	_	LEEDS-GRENVILLE
EGREMONT	114.46	3949	39 0036		GREY
EKFRID	84.80	3193	36 0007	С	MIDDLESEX
ELDERSLIE	93.73	3699	95 0028	D	BRUCE
ELDON	99.91	3052	47 0053	A	VICTORIA
ELIZABETHTOWN	121.31	5373	116 0068	D	LEEDS-GRENVILLE
ELLICE	86.82	2886	23 0030	В	PERTH
RLMA	104.89		35 0030	E	PERTH
ELMSLEY	39.97	1241	23 0070	В	
ELMSLEY N	53.13	1418	20 0079	С	LANARK
ELORA V	1.43		41 0034		WELLINGTON
ELZEVIR/	215.59	1393	32 0062	F	
EMBRO V	2.19		28 0014	С	
EMILY	102.00		45 0052	D	
ENNISKILLEN	130.48		3 0004	В	LAMBTON
ENNISMORE ERAMOSA	31.23		4 0056 55 0034	E	PETERBOROUGH
ERANOSA ERIN TP	71.92 115.85		62 0034	F	
ERNESTOWN	100.09		61 0063	Ğ	LENNOX-ADDINGTON
ESCOTT FRONT	42.03		48 0067	D	LEEDS-GRENVILLE
ESQUESING	112.19		105 0038	F	
ESSA	106.25		48 0041	F	
ETOBICOKE	46.02		35 0044	Ā	
RUPHEMIA	62.16	2390	37 0003	н	LAMBTON
EUPHRASIA	114.75	2899	24 0037	ë	GREY
FARADAY/	194.87	446	4 0062	I	HASTINGS
FENELON	108.00		65 0053	В	VICTORIA
FERGUS V	1.38	1666	42 0034	D	
FINCH	85.94	2729	22 0072	В	
FITZROY	97.89		45 0078	I	
FLAMBOROUGH E	58.75	3894	57 0023	D	
FLAMBOROUGH W	53.65	3413	48 0023	В	WENTWORTH
FLOS	102.63		8 0042	F	
FORT ERIE V FREDERICKSBURG N	44.39		6 0019 14 0063		WELLAND LENNOX-ADDINGTON
FREDERICKSBURG S	37.46		12 0063		LENNOX-ADDINGTON
FRONTENAC WARD, KINGSTON	0.57		23 0066		FRONTENAC
FULLARTON	62.67		19 0029	D	
	02.07	2703	17 0029		- 211211
GAINSBOROUGH	60.56	3016	16 0018	E	LINCOLN
GALT T	2.19		74 0031	D	WATERLOO
GALWAY CAVENDISH	194.75		0 0058	• в	PETERBOROUGH
GANANOQUE V	3.07	2020	50 0067	В	LEEDS-GRENVILLE
GARAFRAXA E	66.77	2579	10 0034	H	WELLINGTON
GARAFRAXA W	78.55	3128	22 0034	G	WELLINGTON
GARDEN ISLAND	0.13	762	2 0065	С	FRONTENAC
GEORGETOWN V	1.86		35 0038	G	HALTON
GEORGINA	65.34		44 0043	H	
GLANFORD	38.41		17 0022	D	WENTWORTH
GLENELG	110.00		44 0036	F	
GLOUCESTER	139.55		25 0076	E	
GODERICH T	2.19		65 0025		HURON
GODERICH TP	88.54		21 0025	F	
GOSFIELD	94.98		88 0001 31 0078	E	
GOULBURN COMPR N	102.18				CARLETON
GOWER N GOWER S	54.69		24 0078 18 0070		CARLETON LEEDS-GRENVILLE
GOWER S GRANTHAM	36.61 34.95		35 O021		TINCOTN TERDS-CKRNAITTE
GRATTAN	109.96		22 0081		RENFREW
GREENOCK	103.97		29 0027	G	BRUCE
	103.37	2301	23 0027	9	DIVOCE

CENSUS SUBDISTRICT	HAME	SQ.MLS	POPULATE	EST CDID	ED	COUNTY
					_	
GREY		101.88 57.84	3855 3123	21 0026 45 0021	J F	HURON LINCOLN
GRIMSBY TP GUELPH T		5.44	6878	109 0033	Č	WELLINGTON
GURLPH TP		67.47	2955	15 0033		WELLINGTON
GUILFORD/		403.01	655	6 0058	_	PETERBOROUGH
GWILLIMBURY E		98.89	3934	64 0043	E	YORK
GWILLIMBURY N	•	49.72	2304	63 0043	G	YORK
GWILLIMBURY W		67.19	3036	54 0041	В	SIMCOR
		104 50	5706	60.0054	_	NODWINNERDT BUD DUDIEN
HALDIMAND		124.52	5796 3554	69 0054 33 0059	C	NORTHUMBERLAND-DURHAM PRINCE EDWARD
HALLOWELL HAMILTON TP		105.80	5721	67 0054	_	NORTHUMBERLAND-DURHAM
HARVEY		168.73	670	4 0058		PETERBOROUGH
HARWICH		149.81	5974	47 0002	D	KENT
HAWKESBURY E		74.78	4611	69 0075		PRESCOTT-RUSSELL
HAWKESBURY V		11.25	1671	39 0075		PRESCOTT-RUSSELL
HAWKESBURY W		52.72	1977	33 0075	_	PRESCOTT-RUSSELL
НАУ		85.20	3897	46 0025	_	HURON
HEAD		121.88	140	0 0082 9 0062	J	RENFREW HASTINGS
HERSCHEL/ HESPELER V		406.20	930 797	22 0031	G	
HIBBERT		66.10		15 0029		PERTH
HILLIER		51.10		37 0059	_	PRINCE EDWARD
HINCHINBROOKE		117.63		5 0064		FRONTENAC
HOLLAND		114.75		38 0037	В	
HOLLAND LANDING V		3.52	649	20 0043	F	YORK
HOPE		108.34		94 0051		NORTHUMBERLAND-DURHAM
HORTON		62.44		15 0081	-	RENFREW
HOUGHTON		61.84		27 0011		NORFOLK
HOWARD		93.39		46 0003		KENT
HOWICK		109.03 85.77		81 0026 38 0026	E	HURON HURON
HULLETT HUMBERSTONE		55.96		47 0019	A	
HUMPHRY/MEDORA		155.62		1 0085	E	
HUNGERFORD		150.13		90 0061	c	
HUNTINGDON		85.94		62 0062	Č	HASTINGS
HUNTLEY		97.81	2634	42 0078	G	CARLETON
HURON		93.35	4079	19 0027	A	BRUCE
INCERCOLL		2 02	4022	60 0013	73	OXFORD
INGERSOLL T INNISFIL		2.83 107.27		69 0013 48 0041	F G	SIMCOR
IROQUOIS V		1.88		31 0071	В	STORMONT-DUNDAS-GLENG
INOGOOID V		1.00	,01	31 0071		DIOIGIONI - DONDIN - GIRNO
JOCKO RIVER		642.50	8	1 0084	F	NIPISSING DIST
				,		
KALADAR/		201.90		3 0064	D	
KAMINISTIKUIA		1360.55		0 0090		ALGOMA DIST
KEMPTVILLE V		0.78		34 O070 5 O064	_	LEEDS-GRENVILLE FRONTENAC
KENNEBEC KENYON		108.00 125.67		78 0074	C	
KEPPEL		132.80		14 0037	I	
KILLARNEY		1328.13		1 0088	_	ALGOMA DIST
KINCARDINE TP		95.05		35 0027		BRUCE
KINCARDINE V		4.22	1907	46 0027	F	
KING		140.88	7482	119 0043	A	YORK
KINGSTON TP		87.12		38 0065		FRONTENAC
KINLOSS		72.96		17 0027	_	BRUCE
KITLEY		89.90	2870	59 0070	A	LEEDS-GRENVILLE
LAKE VERNON		234.38	227	0 0085	T	MUSKOKA DIST
LANARK TP		93.23		22 0080		LANARK
LANARK V		4.58		38 0080	E	
LANCASTER		91.16		48 0074	В	
LAXTON/		190.16	_	14 0053	F	
LEEDS/LANSDOWNE F		111.77		54 0067		LEEDS-GRENVILLE
LEEDS/LANSDOWNE R		115.19		58 0067		LEEDS-GRENVILLE
LINDSAY T		2.54		79 0052	_	VICTORIA
LINDSAY/BURY		287.50		0 0028	H	
LISTOWEL V LOBO		3.13 77.74		35 0030 53 0008	H	
2000		//./4	3474	55 0008	D	MIDDLESEX

CENSUS SUBDISTRICT NAME	SQ.MIS	POPULATE	EST CDID	ED	COUNTY
TOOUTHI	112 07	4027	55 0074	D	CMODMONM-DIMINA C. CI PNC
LOCHIEL	113.87	4827			STORMONT-DUNDAS-GLENG
LOGAN	83.67		17 0030		PERTH MIDDLESEX
LONDON TP	164.31		120 0009	_	
LONGUEIL	36.91		18 0075		PRESCOTT-RUSSELL
LOUGHBOROUGH	86.41	2325	35 0064		FRONTENAC
LOUTH	31.77	1893	48 0021	D	LINCOLN
LUTHER	146.02	1772	10 0035	F	WELLINGTON
	c= 4=	0.50	04 0005	_	
MACAULAY	65.47	868	24 0085	I	MUSKOKA DIST
MADAWASKA E	469.00		4 0083	A	NIPISSING DIST
MADAWASKA W	1131.50		2 0083		NIPISSING DIST
MADOC	107.81	3479	91 0062	E	HASTINGS
MAGNETAWAN	1942.02		6 0086		PARRY SOUND DIST
MAIDSTONE	75.71	2055	3 0001		ESSEX
MALAHIDE	105.70		83 0006		ELGIN
MALDEN	34.02		19 0001		ESSEX
MANITOULIN CENTRE	760.16		4 0087		ALGOMA DIST
MANITOULIN E	180.86		1 0087		ALGOMA DIST
MANITOULIN W	242.19		0 0087	С	ALGOMA DIST
MANVERS	111.56		57 0051		NORTHUMBERLAND-DURHAM
MARA	102.31		19 0049	G	ONTARIO
MARCH	44.06		9 0078	F	CARLETON
MARIPOSA	111.10		69 0052		VICTORIA
MARKHAM	110.77		153 0045	_	YORK
MARLBOROUGH	102.00		9 0078	С	CARLETON
MARMORA/LAKE	214.56		34 0062	D	
MARYBOROUGH	91.16		61 0035	A	WELLINGTON
MARYSBURG N	36.03	1794	16 0059	I	PRINCE EDWARD
MARYSBURG S	45.01		25 0059	H	PRINCE EDWARD
MATAWAN N	360.00	101	0 0084	E	NIPISSING DIST
MATAWAN S	265.00	147	3 0084	С	NIPISSING DIST
MATAWAN W	1442.50	152	1 0084	D	NIPISSING DIST
MATAWATCHAN/	152.23	406	6 0081	E	RENFREW
MATILDA	98.81	4767	87 0071	A	STORMONT-DUNDAS-GLENG
MCGILLIVRAY	100.02	4658	53 0008	E	MIDDLESEX
MCKILLOP	83.47	3808	10 0026	H	HURON
MCLEAN/	273.09	238	0 0085	K	MUSKOKA DIST
MCNAB	106.08	2855	36 0081	A	RENFREW
MEDONTE	106.45	2541	29 0042	I	SIMCOE
MELANCTHON	106.56	2043	17 0036	D	GREY
MERRICKVILLE V	1.56	923	32 0070	D	LEEDS-GRENVILLE
MERSEA	94.66	3248	19 0001	F	ESSEX
METCALFE	57.38	2449	23 0007	D	MIDDLESEX
MICHIPICOTEN	6739.00	228	0 0090	В	ALGOMA DIST
MIDDLETON	72.36	3261	51 0012	A	NORFOLK
MILTON T	0.64	891	30 0038	D	HALTON
MINDEN	71.09		7 0058	E	PETERBOROUGH
MINTO	113.42		71 0035		WELLINGTON
MISSISSAGA	3059.38		2 0088		ALGOMA DIST
MITCHELL V	6.25		38 0029	E	PERTH
MONAGHAN N	24.38		6 0056	В	PETERBOROUGH
MONAGHAN S	27.60		9 0056	A	
MONCK	71.09		1 0085	C	MUSKOKA DIST
MONO	109.50		55 0040	C	SIMCOE
MONTAGUE	103.43		35 0079		LANARK
MONTREAL RIVER	3700.00		0 0084		NIPISSING DIST
MOORE	115.39		30 0004		LAMBTON
MORNINGTON	79.26		38 0030		PERTH
MORRIS	89.25		19 0026	G	
MORRISBURG V	2.41		36 0071	D	STORMONT-DUNDAS-GLENG
MORRISON	75.81		3 0085	A	MUSKOKA DIST
MOSA	77.70		25 0007	A	MIDDLESEX
MOULTON/	54.40		14 0018	A	HALDIMAND
MOUNT FOREST V	1.37		23 0035	E	
MOUNTAIN	91.80		50 0071	E	
MULMUR	111.65		33 0041	D	
MURRAY	76.40		36 0055	E	
MUSKOKA TP	71.09		1 0085	В	MUSKOKA DIST
NAPANEE V	3.75	2967	62 0063	E	LENNOX-ADDINGTON
NASSAGAWEYA	68.52	2964	48 0038	E	HALTON
NELSON	76.50		90 0038	A	HALTON
NEPEAN	104.46	5069	40 0078	A	CARLETON

CENSUS SUBDISTRICT NAME					COUNTY
NEW EDINBURGH V NEW HAMBURG V NEWBURGH V NEWCASTLE V NEWMARKET V NIAGARA TP NICHOL NIPIGON NISSOURI E NISSOURI W NORMANBY NORWICH N NORWICH S NOTTAWASAGA					
MEN EDINDHOCH U	0.39	596	5 0076	17	CARLETON
NEW HAMRIEG V	1.95	1003	26 0031	В	WATERLOO
NEWBURGH V	5.47	828	31 0064	В	LENNOX-ADDINGTON
NEWCASTLE V	3.56	1109	30 0050	E	NORTHUMBERLAND-DURHAM
NEWMARKET V	1.29	1760	40 0043	D	YORK
NIAGARA TP	36.91	2093	17 0020	A	LINCOLN
NICHOL	44.63	2737	37 0034	С	WELLINGTON
NIPIGON	9183.69	438	0 0090	R	ALGOMA DIST
NISSOURI E	73.95	3008	19 0000	A	MIDDLESEX
NISSURI W	101 04	5563	73 0036	A	CBEA
NORMANDI NODWICH N	.57.38	3324	68 0013	Ĉ	OXFORD
NORWICH S	57.31	3225	41 0013	В	OXFORD
NOTTAWASAGA	155.55	6704	92 0042	A	SIMCOE
OAKLAND OAKVILLE T OIL SPRINGS V OLDEN ONEIDA ONONDAGA ONTARIO WARD, KINGSTON OPS ORANGEVILLE V ORFORD			10 0015		
OAKLAND	17.21	1104	19 0015		BRANT HALTON
OAKVILLE T	2.12	1084	20 0038		LAMBTON
OIL SPRINGS V	111 25	551	10 0064	_	FRONTENAC
ONETDA	70.16	3183	35 0017		HALDIMAND
ONONDAGA	35.20	1924	22 0016		BRANT
ONTARIO WARD, KINGSTON	0.07	1262	20 0066	_	FRONTENAC
OPS	95.63	3350	19 0052	В	VICTORIA
ORANGEVILLE V	2.15	1458	48 0034	I	WELLINGTON
ORFORD	84.47	3113	22 0003		KENT
ORILLIA V	0.72	1322	35 0042		SIMCOE
ORILLIATP	194.69	1894	17 0042		SIMCOE
ORO	118.89	4364	44 0042	_	SIMCOE
OSGOODE	145.31	4207	41 00/6		CARLETON ONTARIO
OSNARDUCK	108 69	5701	93 0072	_	STORMONT-DUNDAS-GLENG
OSNABRUCK	76.99	492	1 0064		FRONTENAC
OSPRRY	110.43	3033	11 0036		GREY
OTONABEE	108.07	3992	38 0057		PETERBOROUGH
OTTAWA WARD, OTTAWA	0.32	5738	22 0077	E	CARLETON
OWEN SOUND T	9.56	3369	81 0037	G	GREY
OXFORD E	54.32	2610	27 0013	_	OXFORD
OXFORD N	37.46	1855	20 0013		OXFORD
OXFORD TP	118.75	4051	44 0070		LEEDS-GRENVILLE
ONTARIO WARD, KINGSTON OPS ORANGEVILLE V ORFORD ORILLIA V ORILLIA.TP ORO OSGOODE OSHAWA T OSNABRUCK OSO OSPREY OTONABEE OTTAWA WARD, OTTAWA OWEN SOUND T OXFORD E OXFORD N OXFORD TP OXFORD W	41.67	2804	33 0013	E	OXFORD
PAKENHAM PALMERSTON/ PARIS T PEEL DELEE	100.00	2426	42 0080	С	LANARK
PALMERSTON/	192.27	546	0 0064	N	FRONTENAC
PARIS T	1.24	2640	45 0016	С	BRANT
PEEL	117.02	5744	58 0035	В	WELLINGTON
E DAME	10.41	130	3 0001	0	DUDDA
PELHAM	46.22		41 0018		WELLAND
PEMBROKE TP	12.76		8 0082		RENFREW
PEMBROKE V	1.80		28 0082		RENFREW
PERCY PERTH T	88.95 1.62		69 0055 77 0079	F H	
PETAWAWA	63.19		4 0082		RENFREW
PETAWAWA CENTRE	361.25		1 0083	F	
PETAWAWA N	115.75		1 0083	E	
PETAWAWA S	251.50		0 0083	_	NIPISSING DIST
PETAWAWA W	940.50		2 0083		NIPISSING DIST
PETERBOROUGH T	2.47	4611	96 0056	С	PETERBOROUGH
PETROLIA V	4.25		48 0004		LAMBTON
PIC	8123.73		0 0090		ALGOMA DIST
PICKERING	116.66		132 0048	A	
PICTON T	0.83		74 0059		PRINCE EDWARD
PILKINGTON PITTERIDGE/	48.06 86.50		8 0034 29 0065		WELLINGTON EPONTENAC
PITTSBURGH/ PLANTAGENET N	86.35		32 O075		FRONTENAC PRESCOTT-RUSSELL
PLANTAGENET S	79.06		26 0075		PRESCOTT-RUSSELL
PLYMPTON	122.23		58 0004		LAMBTON
PORT COLBORNE V	0.60		10 0019		WELLAND
PORT DALHOUSIE V	0.63		20 0021	č	
PORT HOPE T	2.21		77 0051	В	
PORTLAND	89.06	2718	38 0064	I	FRONTENAC
PORTSMOUTH V/PEN	0.47		15 0065	В	
PRESCOTT T	1.75		40 0069	В	
PRESTON V	2.90	1408	52 0031	F	WATERLOO

CENSUS SUBDISTRICT HAME	SO.MIS PO	OPIT A TEL	EST CDID	PD	COUNTY
CRESUS SUDDISTRICT MANA	DZ:RLD IV) CIELLI	EUI CDID	A.V	COUNTY
PROTON	126.12	2184	8 0036	С	GREY
PUSLINCH	95.30	4514	35 0033		WELLINGTON
RAINHAM RALEIGH	42.40 114.44	2067 4081	36 O017 15 O002	B	HALDIMAND KENT
RAMA	66.44	904	4 0049	Н	ONTARIO
RAMSAY	98.74	3218	71 0080	A	LANARK
RAWDON REACH	107.42 104.88	3688 6809	74 O062 120 O049	A B	HASTINGS ONTARIO
RENFREW V	3.78	865	41 0081	I	RENFREW
RICHMOND TP RICHMOND V	81.59 2.47	3431 487	37 0063 16 0078		LENNOX-ADDINGTON CARLETON
RIDEAU WARD, KINGSTON	0.65	2066	9 0066		FRONTENAC
ROCHER CAPITAINE ROCHESTER	188.50 56.11	70 2152	0 0084 20 0001		NIPISSING DIST ESSEX
ROLPH/	257.44	459	2 0082	K	RENFREW
ROMNEY ROSS	41.26 85.49	711 1682	3 0002 5 0082		KENT RENFREW
ROXBOROUGH	111.88	3353	46 0072	_	STORMONT-DUNDAS-GLENG
RUSSELL	72.40	2339	11 0076	D	PRESCOTT-RUSSELL
CALMATARA	44.55	2702	22 0022		WENTWORTH
SALTFLEET SANDWICH E	44.66 67.35	2783 3748	22 O022 37 O001		ESSEX
SANDWICH T	3.36	1160	34 0001		ESSEX
SANDWICH W SARAWAK	37.87 17.90	2228 680	11 0001 6 0037		ESSEX GREY
SARNIA T	1.07	2929	55 0004		LAMBTON
SARNIA TP SAUGEEN	74.08 68.13	3438 2579	22 0004 26 0028		LAMBTON BRUCE
SAULT STE MARIE	804.69	879	4 0089	В	ALGOMA DIST
SCARBOROUGH SCOTT	71.72 78.72	4615 2775	55 0045 43 0049		YORK ONTARIO
SCUGOG	17.21	880	8 0049	С	ONTARIO
SEAFORTH V SEBASTOPOL	0.64 74.79	1368 650	48 0026 5 0081	I	HURON RENFREW
SENECA	59.47	3282	32 0017	_	HALDIMAND
SEYMOUR SHEFFIELD	115.63 131.62	4289 2615	69 0055 29 0064	G	NORTHUMBERLAND-DURHAM LENNOX-ADDINGTON
SHERBROOKE N/	215.05	2295	20 0080	_	LANARK
SHERBROOKE S	68.75	833	78 0079		LANARK HASTINGS
SIDNEY SIMCOE T	111.67 0.74	5264 1856	91 0060 57 0012		NORFOLK
SMITH	97.53	3428	30 0056	D	PETERBOROUGH
SMITHS FALLS V SNOWDEN/	0.66 178.45	1150 399	43 0079 1 0058	B D	LANARK PETERBOROUGH
SOMBRA	117.21	3397	33 0003	F	LAMBTON
SOPHIASBURG	67.64	2702	12 0053 28 0059	F	PRINCE EDWARD
SOUTHAMPTON V	3.67	858	29 0028	C	BRUCE
SOUTHWOLD SPANISH RIVER	125.90 6900.00	5559 544	3 0088	B	ALGOMA DIST
ST ANDREW WARD, HAMILTON	0.25	4780	99 0024	C	WENTWORTH
ST ANDREW WARD, TORONTO ST CATHARINES T	0.61 1.93	8918 7864	88 0046 158 0021	B	YORK LINCOLN
ST DAVID WARD, TORONTO	1.84	11229	47 0047	C	YORK
ST GEORGE WARD, HAMILTON ST GRORGE WARD, OTTAWA	1.00 0.78	4583 3474	59 0024 53 0077	A	WENTWORTH CARLETON
ST GEORGE WARD, TORONTO	1.59	3534	73 0046	A	YORK
ST IGNACE	537.89	168 9779	0 0090	D	ALGOMA DIST
ST JOHN WARD, TORONTO	0.69	10868	37 0046	D	YORK
ST LAWRENCE WARD, HAMILTON	0.81	6138	39 0024	D	WENTWORTH FRONTRNAC
ST LAWRENCE WARD, TORONTO	1.29	3861	145 0047	A	YORK
ST MARY WARD, HAMILTON	1.08	6669	90 0024	В	WENTWORTH
ST PATRICK WARD, HAMILTON	0.57	4546	42 0024	E	WENTWORTH
ST PATRICK WARD, TORONTO	2.75	7903	16 0046	C	YORK
ST VINCENT	103.43	4974	123 0037	H	GREY
STAFFORD	33.83	798	10 0082	F	RENFREW
SMITH SMITHS FALLS V SNOWDEN/ SOMBRA SOMERVILLE SOPHIASBURG SOUTHAMPTON V SOUTHWOLD SPANISH RIVER ST ANDREW WARD, HAMILTON ST ANDREW WARD, TORONTO ST CATHARINES T ST DAVID WARD, TORONTO ST GEORGE WARD, HAMILTON ST GEORGE WARD, OTTAWA ST GEORGE WARD, TORONTO ST IGNACE ST JAMES WARD, TORONTO ST JOHN WARD, TORONTO ST LAWRENCE WARD, HAMILTON ST LAWRENCE WARD, KINGSTON ST LAWRENCE WARD, KINGSTON ST LAWRENCE WARD, TORONTO ST MARY WARD, HAMILTON ST MARYS T ST PATRICK WARD, HAMILTON ST PATRICK WARD, TORONTO ST THOMAS T ST VINCENT STAFFORD STAMFORD	162.96	310	1 0058	J	WELLAND PETERBOROUGH

CRESUS SUBDISTRICT HAME	SQ.MLS	POPULATH	EST CDID	ED	COUNTY
	_				
STANLEY	72.17	3804	43 0025	Ď	HURON
STEPHEN	84.13	4349	48 0025	A	HURON
STEPHENSON	79.70	505	1 0085	J	MUSKOKA DIST
STIRLING V	1.56	779	42 0062	В	HASTINGS
STORRINGTON	98.44	2882	33 0065	F	FRONTENAC
STRATFORD T	3.59	4313	82 0030	C	PERTH
STRATHROY V	3.75	3232	62 0007	F	MIDDLESEX
STREETSVILLE V	0.95	617	19 0039	В	PERL
SULLIVAN	114.75	3151	28 0037	A	GREY
	87.97	1991	137 0042	Ĉ	SIMCOR
SUNNIDALE	118.75	4011	48 0037	F	GREY
SYDENHAM			23 0066	F	FRONTENAC
SYDENHAM WARD, KINGSTON	. 0.18	1944	23 0000	r	FRONTENAC
MANA CANTIVOTTO	2865.63	145	0 0084	I	NIPISSING DIST
TAMAGAMINQUE			22 0042	H	SIMCOR
TAY	78.75	1629			
TECUMSETH	107.09	4728	72 0041		SIMCOE
TEMISCAMANG W	1261.72	36	0 0084		NIPISSING DIST
THE SOUND	664.67	1052	8 0086		PARRY SOUND DIST
THORAH	69.25	1965	22 0049	F	
THOROLD TP	38.87	2501	27 0019	H	WELLAND
THOROLD V	1.59	1635	39 0019	I	WELLAND
THURLOW	94.03	5186	60 0061	A	HASTINGS
TILBURY E	83.83	1846	42 0002	В	KENT
TILBURY W	79.05	2392	20 0001	N	ESSEX
TINY	129.09	3214	25 0042	G	SIMCOR
TORBOLTON	41.40	751	4 0078	H	CARLETON
TORONTO GORE	31.25	1559	16 0039	C	PREL
TORONTO TP	107.09	5974	61 0039	A	PERL
TOSSORONTIO	71.40	1570	11 0041	E	SIMCOB
TOWNSEND	105.80	5474	54 0012	č	NORFOLK
TRAFALGAR	109.97	5027	49 0038	В	HALTON
TRENTON V	1.26	1796	34 0060	В	HASTINGS
TUCKERSMITH	66.09	3699	41 0025	B	HURON
					HASTINGS
TUDOR/	369.11	1055	19 0062	G	
TURNBERRY	57.14	3201	46 0026	K	HURON
TUSCARORA	64.25	2606	0 0015	E	BRANT
TYENDINAGA	147.89	7573	88 0061	В	Hastings
USBORNE	69.20	3831	38 0025	С	HURON
UXBRIDGE TP	82.55	4762	57 0049	A	ONTARIO
VAUGHAN	108.38	7657	116 0044	В	YORK
VERULAM	101.45	2692	20 0052	E	VICTORIA
VESPRA	105.81	2077	18 0042	D	SIMCOR
VICTORIA WARD, KINGSTON	0.54	1723	2 0066	A	FRONTENAC
VICTORIA WARD, KINGSTON VICTORIA WARD, OTTAWA	0.35	3156	2 0066 28 0077 18 0006	В	CARLETON
VIENNA V	2.14	593	18 0006	F	RIGIN
•				_	
WAINFLEET	92.44	2673	11 0018	G	WELLAND
WALLACE	80.50				PERTH
WALPOLE	107.09	5.477	78 0017		HALDIMAND
WATCINCUAM		3581 5477 5290	40 0017		
WALSINGHAM WARD NO 1, LONDON	144.27	3270	49 0011	В	
	0.18				MIDDLESEX
WARD NO 2, LONDON	0.21	2736			MIDDLESEX
WARD NO 3, LONDON	0.27	3586	70 0010		MIDDLESEX
WARD NO 4, LONDON	0.22	1210 2590	27 0010		MIDDLESEX
WARD NO 5, LONDON	0.51				MIDDLESEX
WARD NO 6, LONDON WARD NO 7, LONDON	0.48	2175	2 0010 3 0010		MIDDLESEX
WARD NO 7, LONDON WARDSVILLE V WARWICK WATERLOO N WATERLOO S WATERLOO V WATT/CARDWELL WAWANOSH E WAWANOSH W WELLAND V WELLESLEY	1.09	2175 1134	3 0010		MIDDLESEX
WARDSVILLE V	0.71	539 4677	32 0007	В	MIDDLESEX
WARWICK	112.91	4677	59 0004		LAMBTON
WATERLOO N	62.66	3640	60 0032	C	WATERLOO
WATERLOO S	86.38	4198		E	WATERLOO
WATERLOO V	4.39	1594	52 0032	E	WATERLOO
WATT/CARDWELL	149.32	711	2 0085	D	
WAWANOSH E	66.94	2651	19 0026	D	HURON
WAWANOSH W	66.94	2748			HURON
WELLAND V	1 77	1110		F	
WELLESLEY					WATERLOO
WELLINGTON V	2 27	517		P	DDINCE BUREAU
WELLESLEY WELLINGTON V WELLINGTON WARD, OTTAWA	0.00	5710 517 4039	10 0033	D	PRINCE EDWARD CARLETON
	0.30	4033	10 00//	A	CARLE ION

CENSUS SUBDISTRICT NAME	SQ.MLS	POPULATN	EST	CDID	ED	COUNTY
WEST WARD, NIAGARA	0.47	511	4	0020	В	LINCOLN
WESTMEATH	111.06	2632	38	0082	С	RENFREW
WESTMINSTER	100.41	6386	69	0009	A	MIDDLESEX
WHITBY E	54.22	3411	38	0048	D	ONTARIO
WHITBY T	6.63	2732	46	0048	С	ONTARIO
WHITBY W	49.47	3220	50	0048	В	ONTARIO
WHITCHURCH	100.41	5014	74	0043	В	YORK
WILBERFORCE	106.52	1955	31	0082	G	RENFREW
WILLIAMS E	62.74	2853	31	8000	С	MIDDLESEX
WILLIAMS W	57.62	3427	47	8000	В	MIDDLESEX
WILLIAMSBURG	95.72	4724	100	0071	С	STORMONT-DUNDAS-GLENG
WILLOUGHBY	29.30	1250	4	0019	G	WELLAND
WILMOT	98.96	5811	90	0031	A	WATERLOO
WINCHESTER	91.80	4090	88	0071	F	STORMONT-DUNDAS-GLENG
WINDHAM	105.72	4799	53	0012	В	NORFOLK
WINDSOR T	2.92	4253	49	0001	K	ESSEX
WOLFE ISLAND	47.81	2737	19	0065	D	FRONTENAC
WOLFORD	77.13	2550	24	0070	С	LEEDS-GRENVILLE
WOOD	136.72	90	0	0085	F	MUSKOKA DIST
WOODHOUSE	54.50	3865	52	0011	D	NORFOLK
WOODSTOCK T	2.65	3982	72	0014	E	OXFORD
WOOLWICH	92.44	5569	114	0032	В	WATERLOO
YARMOUTH	113.76	5563	87	0006	A	ELGIN
YONGE FRONT	51.64	1671		0067	E	LEEDS-GRENVILLE
YONGE/ESCOTT REAR	53.65	1791		0067	F	LEEDS-GRENVILLE
YORK E	43.12	4390		0045	Ā	
YORK W	60.79	5618		0044	c	YORK
YORKVILLE V	0.78	2203		0045	В	YORK
ZONE	38.70	1083	5	0003	D	KENT
ZORRA E	87.97	4619	50	0014	D	OXFORD
ZORRA W	87.66	3400		0014	В	OXFORD

CANADIAN INDUSTRY IN 1871 PROJECT (CANIND71) RESEARCH REPORT SERIES

Reports in this series describe the procedures used to make the 1871 manuscript census data for industrial establishments machine-readable as the CANIND71 database and present preliminary analyses and interpretations of selected topics or regions; illustrated with tables, maps, diagrams and prints.

- 1. Industry in Ontario Urban Centres, 1870: Accessing the Manuscript Census, Elizabeth Bloomfield, G.T. Bloomfield, Janine Grant and Peter McCaskell (1986), 56 pp. ISBN 0-88955-066-2
- 2. Water Wheels and Steam Engines: Powered Establishments in Ontario, G.T. Bloomfield and Elizabeth Bloomfield (1989), 49 pp. ISBN 0-88955-189-8
- 3. The Ontario Urban System at the Onset of the Industrial Era, 1871, Elizabeth Bloomfield and G.T. Bloomfield (1989), 59 pp. ISBN 0-88955-191-X
- 4. Creating CANIND71: Procedures for Making the 1871 Industrial Census Machine-Readable, Elizabeth Bloomfield and G.T. Bloomfield (1989), 64 pp. ISBN 0-88955-192-8
- 5. Glossary of Industrial Language, Jane Turner, Janine Grant and Barbara Sibley (1989), 54 pp. ISBN 0-88955-188-X
- 6. French-English Dictionary of Industrial Language, Jane Turner, Janine Grant and Barbara Sibley (1989), 27 pp. ISBN 0-88955-210-X
- 7. Standard Industrial Classifications Applied to Historical Data: the Case of the 1871 Industrial Census, G.T. Bloomfield and Elizabeth Bloomfield (1989), 66 pp. ISBN 0-88955-193-6
- 8. Industrial Leaders: The Largest Manufacturing Firms in Ontario, 1871, Elizabeth Bloomfield and G.T. Bloomfield (1989) 69 pp. ISBN 0-88955-194-4
- 9. The Hum of Industry: Millers, Manufacturers and Artisans of Wellington County, Elizabeth Bloomfield and G.T. Bloomfield (1989) 84 pp. ISBN 0-88955-195-2
- 10. Boundaries of Canadian Census Units in 1871, G.T. Bloomfield (1990) 110 pp. ISBN 0-88955-206-1
- 11. Canadian Women in Workshops, Mills, and Factories: The Evidence of the 1871 Census Manuscripts, Elizabeth Bloomfield and G.T. Bloomfield (1991) 106 pp. ISBN 0-88955-226-6
- 12. Patterns of Canadian Industry in 1871: An Overview Based on the First Census of Canada, Elizabeth Bloomfield and G.T. Bloomfield (1990) 80 pp. ISBN 0-88955-227-4
- 13. Ontario Central Places in 1871: A Gazetteer Compiled from Contemporary Sources, G.T. Bloomfield and Elizabeth Bloomfield with Brian Van Nostrand (1990) 180 pp. ISBN 0-88955-228-2
- 14. Industry in Ontario Counties, 1871: A Preliminary Atlas, G.T. Bloomfield and Elizabeth Bloomfield with Larry Laliberté (1992) 200 pp. ISBN 0-88955-320-3

CANIND71 PROJECT

Department of Geography

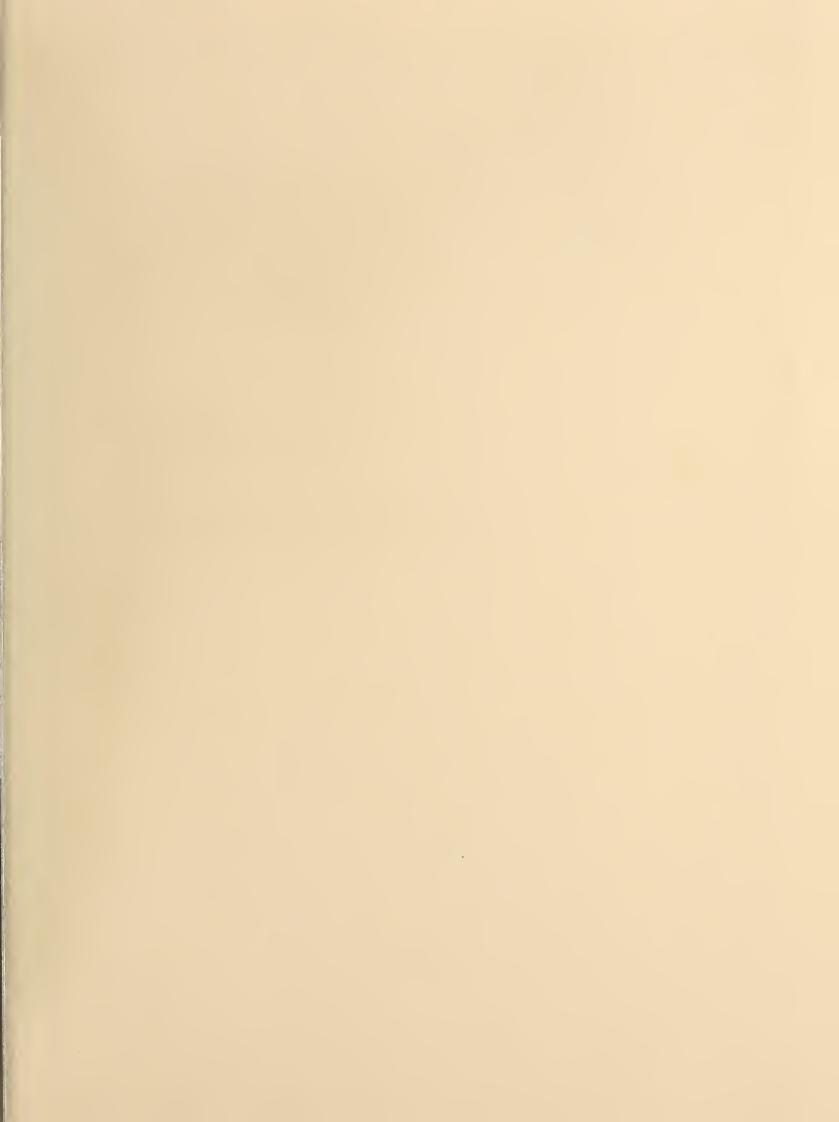
University of Guelph

GUELPH, ONTARIO, CANADA, N1E 1C9

CANADIAN INDUSTRY IN 1871: ONTARIO COUNTY SERIES

CANIND71 Project, Department of Geography Guelph, Ontario, N1G 2W1

0-88955-247-9	Brant County Industries, 1871: Index to Manuscript Census (#1 in series)
0-88955-248-7	Bruce County Industries, 1871: Index to Manuscript Census (#2 in series)
0-88955-249-5	Carleton County Industries, 1871: Index to Manuscript Census (#3 in series)
0-88955-250-9	Elgin County Industries, 1871: Index to Manuscript Census (#4 in series)
	Essex County Industries, 1871: Index to Manuscript Census (#5 in series)
0-88955-252-5	Essex County industries, 10/1. Index to Manuscript Consus (#6 in series)
0-88955-253-3	Frontenac County Industries, 1871: Index to Manuscript Census (#6 in series)
0-88955-254-1	Grey County Industries, 1871: Index to Manuscript Census (#7 in series)
0-88955-255-X	Haldimand County Industries, 1871: Index to Manuscript Census (#8 in series)
0-88955-256-8	Halton County Industries, 1871: Index to Manuscript Census (#9 in series)
0-88955-257-6	Hastings County Industries, 1871: Index to ManuscriptCensus (#10 in series)
0-88955-258-4	Huron County Industries, 1871: Index to Manuscript Census (#11 in series)
0-88955-259-2	Kent County Industries, 1871: Index to Manuscript Census (#12 in series)
0-88955-260-6	Lambton County Industries, 1871: Index to Manuscript Census (#13 in series)
0-88955-261-4	Lanark County Industries, 1871: Index to Manuscript Census (#14 in series)
0-88955-262-2	Leeds & Grenvile County Industries, 1871: Index to Manuscript Census
0-00733-202-2	
0.00055.063.0	(#15 in series)
0-88955-263-0	Lennox & Addington County Industries, 1871: Index to Manuscript Census
	(#16 in series)
0-88955-264-9	Lincoln County Industries, 1871: Index to Manuscript Census (#17 in series)
0-88955-265-7	Middlesex County Industries, 1871: Index to Manuscript Census (#18 in series)
0-88955-266-5	Norfolk County Industries, 1871: Index to Manuscript Census (#19 in series)
0-88955-267-3	Northumberland & Durham County Industries, 1871: Index to Manuscript Census
	(#20 in series)
0-88955-268-1	Ontario County Industries, 1871: Index to Manuscript Census (#21 in series)
0-88955-269-X	Oxford County Industries, 1871: Index to Manuscript Census (#22 in series)
0-88955-270-3	Peel County Industries, 1871: Index to Manuscript Census (#23 in series)
0-88955-271-1	Perth County Industries, 1871: Index to Manuscript Census (#25 in series)
0-88955-272-X	Peterborough County Industries, 1871: Index to Manuscript Census (#25 in series)
0-88955-273-8	Prescott & Russell County Industries, 1871: Index to Manuscript Census
0.000.55.054.6	(#26 in series)
0-88955-274-6	Prince Edward County Industries, 1871: Index to Manuscript Census
	(#27 in series)
0-88955-275-4	Renfrew County Industries, 1871: Index to Manuscript Census (#28 in series)
0-88955-276-2	Simcoe County Industries, 1871: Index to Manuscript Census (#29 in series)
0-88955-277-0	Stormont, Dundas & Glengarry County Industries, 1871: Index to Manuscript
	Census (#30 in series)
0-88955-278-9	Victoria County Industries, 1871: Index to Manuscript Census (#31 in series)
0-88955-279-7	Waterloo County Industries, 1871: Index to Manuscript Census (#32 in series)
0-88955-280-0	Welland County Industries, 1871: Index to Manuscript Census (#32 in series)
0-88955-281-9	
	Wentworth County Industries, 1871: Index to Manuscript Census (#34 in series)
0-88955-282-7	York County Industries, 1871: Index to Manuscript Census (#35 in series)
0-88955-283-5	Northern Districts Industries, 1871: Index to Manuscript Census (#36 in series)



ž.





University of Waterloo

University of Waterloo Library

Library

University of Waterloo Library

MAR 0 3 1994

